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[54] **GOLF BALL TARGET**

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[51] **Int. Cl.**..... **A63b 69/36;** A63b 63/00

[58] **Field of Search** ..... 273/182, 176 FA, 176 A, 273/105, 102.4, 103, 102.2 R, 181, 102.1

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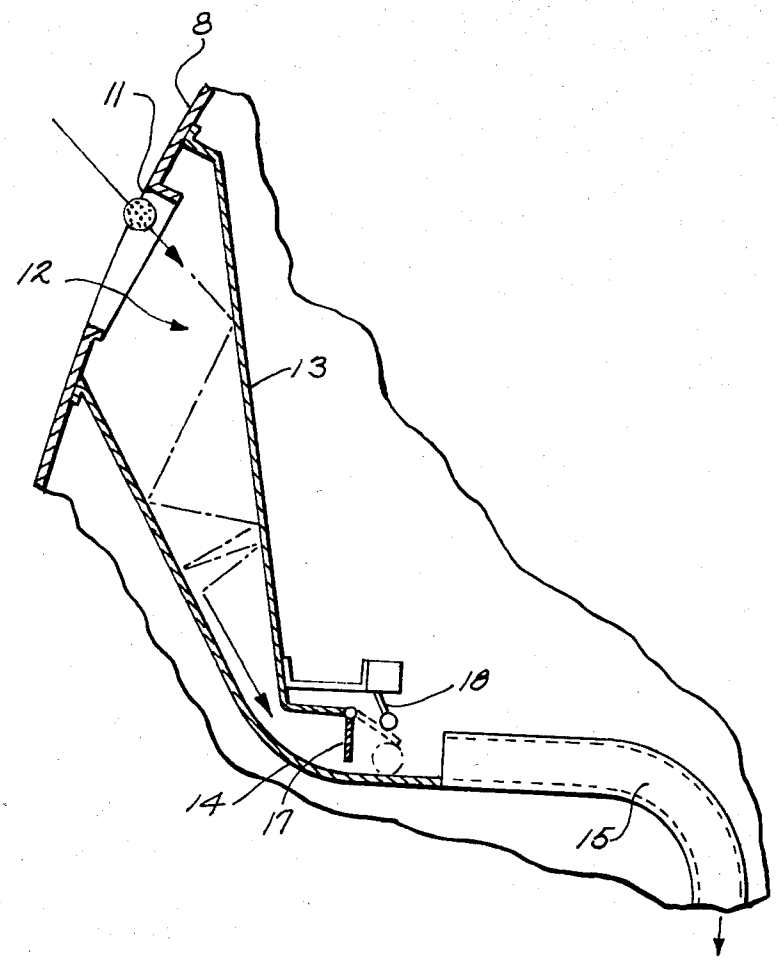
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[57] **ABSTRACT**

A target device having a particular use in association with a golf driving range. The device includes a target, preferably shaped as a golf ball, having a series of target holes to receive a ball driven by a golfer. A trap or collector is located behind each target hole and a ball entering a hole is collected in the trap and conveyed to a collection area. Travel of the ball through the conveying system actuates a signal, such as a visual or audio alarm, to indicate for a predetermined time that a ball entered a target hole.

3 Claims, 6 Drawing Figures



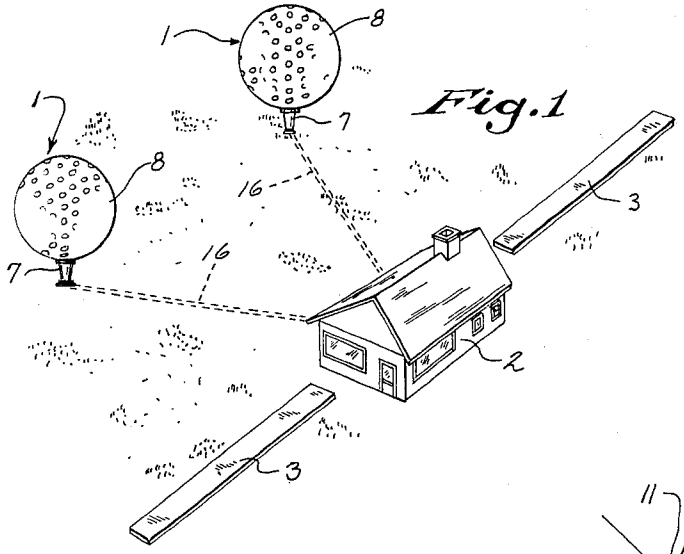


Fig.1

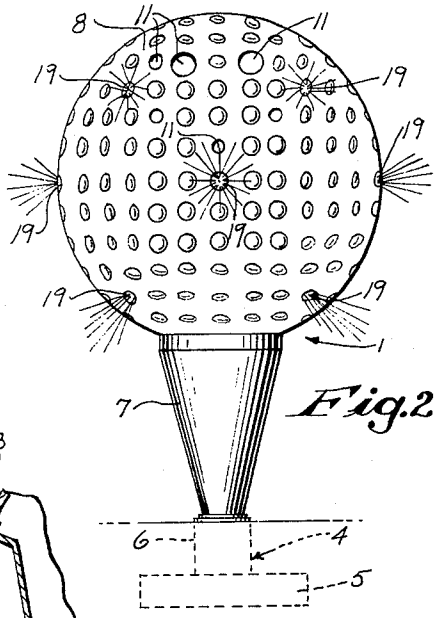


Fig.2

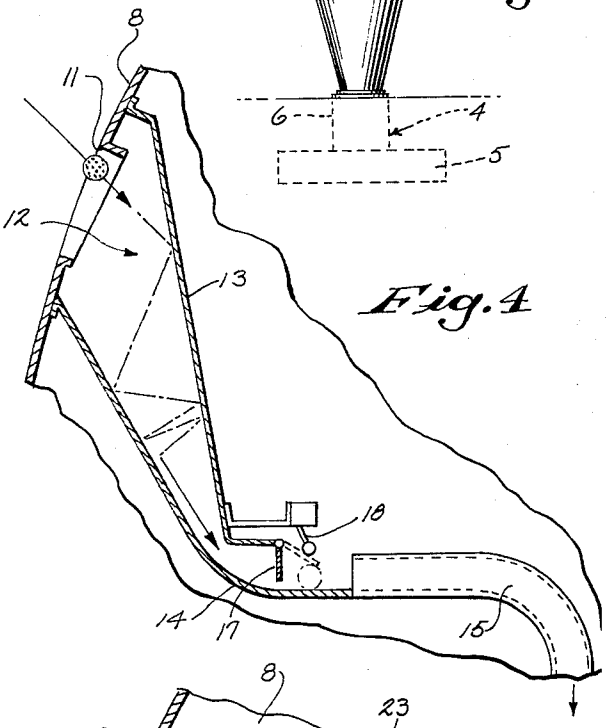


Fig.4

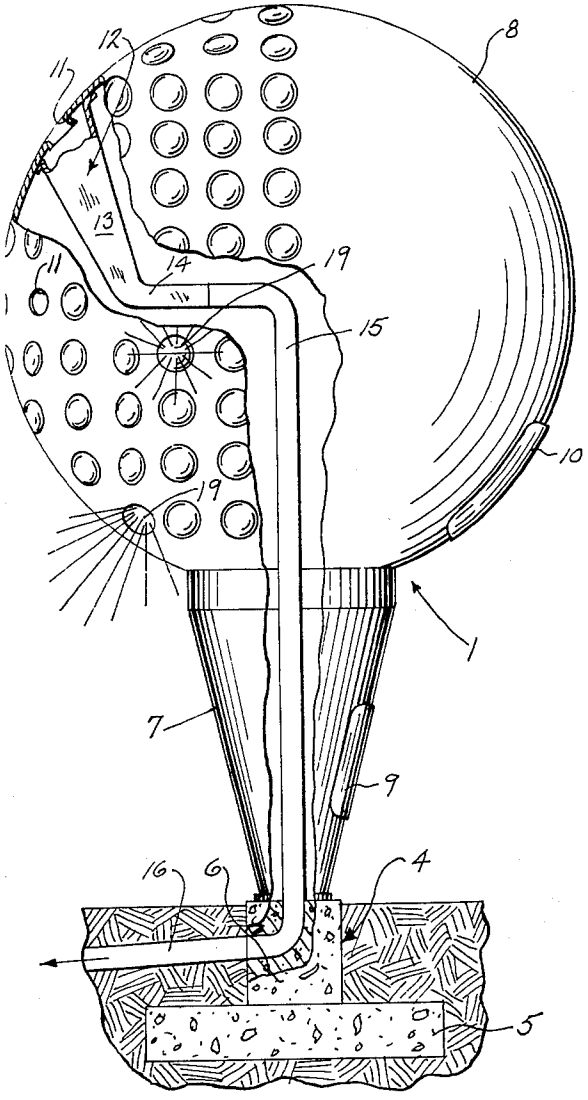


Fig.3

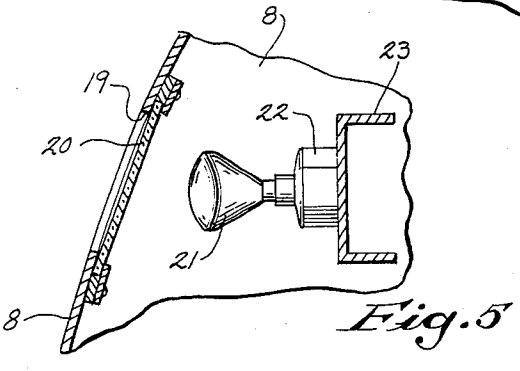


Fig.5

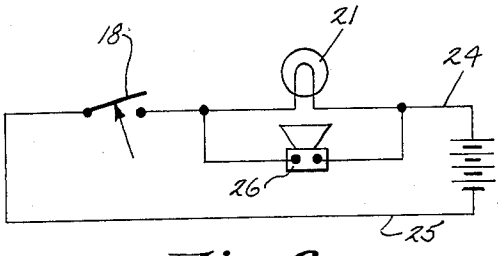


Fig.6

GOLF BALL TARGET

BACKGROUND OF THE INVENTION

The conventional practice golf driving range includes one or more hitting areas or platforms from which golfers hit balls into a fairway area. The fairway area may contain yardage markers indicating the yardage from the hitting area, and in some cases, flagstaffs may be placed in the fairway area to simulate greens to provide a target for hitting.

In addition to the practice driving range, other types of smaller practice devices are frequently used by the golfer to increase his proficiency. The conventional practice device includes a screen or tarpaulin which may have targets or pockets to receive the balls. Practice devices of this type are generally used indoors or in restricted areas so that the screen or target is relatively close to the golfer.

SUMMARY OF THE INVENTION

The invention relates to a target device having particular use in association with a golf driving range. The target device is located a substancial distance, perhaps in the range of 100 to 150 yards from the hitting area, and includes a large target, which is preferably spherical in shape and has the appearance of a golf ball. The target is provided with one or more target holes to receive a ball driven by a golfer from the hitting area. Located from behind each of the target holes is a trap or collector which leads to a conveying system, and a ball entering a trap through the target hole will be conveyed by the conveying system either to a collection area associated with the target or to a collection area located adjacent the hitting area.

Travel of the ball through the conveying system operates a signaling device to provide either a visual or audio alarm to thereby indicate that a ball has been received in a target hole.

In operation, the golfer will receive or purchase a bucket or container of balls, each of which has identical markings, such as numbers or colors, with the markings appearing on the golf balls used by one golfer being distinct from those appearing on the golf balls of other golfers. If, when hit, one of the balls enters a target hole, it will pass through the trap to the collection area and, in doing so, will actuate the signaling device to thereby operate flashing lights and a horn to signal that a ball entered a target hole. The attendant can then retrieve the ball either from the collection area in the target or from the collection area in the pro shop to determine the golfer who made the target hit and that golfer would be awarded a monetary or merchandise prize.

The present invention acts to increase the skill of the golfer by having him hit at a given target, and the golfer's skill can result in an award if a ball enters the target hole.

Other objects and advantages will appear in the course of the following description.

DESCRIPTION OF THE DRAWINGS

The drawings illustrate the best mode presently contemplated of carrying out the invention.

In the drawings:

FIG. 1 is a perspective view of a golf driving range incorporating the target devices of the invention;

FIG. 2 is a front elevation of a target device;

FIG. 3 is a side elevation of a target device with parts broken away in section;

FIG. 4 is an enlarged fragmentary section of the target showing the trap and conveying tube;

FIG. 5 is an enlarged fragmentary section showing the arrangement of the lights; and

FIG. 6 is a wiring diagram.

DESCRIPTION OF THE ILLUSTRATED EMBODIMENT

FIG. 1 shows a typical golf driving range which incorporates the target devices 1 of the invention. The golf driving range will normally include a pro shop or dwelling 2, and have one or more driving or hitting areas 3 which can consist of mats, platforms or merely designated areas of the ground. As shown in FIG. 1, the target devices 1 are located a substantial distance from the driving areas 3, perhaps in the range of 100 to 150 yards. Any number of target devices 1 can be utilized and it is contemplated that they can be located at different distances from the driving areas.

As illustrated in FIGS. 2 and 3, each of the target devices 1 includes a concrete foundation 4 comprising a footing 5 and a column 6 which extends upwardly from the footing to a position slightly above grade. Mounted on the column 6 is a hollow base 7 which is shaped in the form of a golf tee with the lower end of the base having a smaller diameter than the upper end.

The target device 1 also includes a large target 8, which is mounted on the upper end of the base 7. As shown in the drawings, the target is spherical and represents a golf ball, having surface indentations or dimples which represent the dimples appearing on a conventional golf ball. The base 7 and spherical target 8 can be formed of sheet metal or fiber reinforced plastic and the base and target are provided with access openings 9 and 10, respectively.

While the base and the target are shown in the form of a golf tee and golf ball, respectively, the particular shape of the base and target is not critical to the invention and can take various forms.

The target 8 is provided with one or more target holes 11, which can all be of the same size or can be of various sizes. Located behind each of the target holes, as shown if FIG. 4, is a generally funnel-shaped trap or collector 12 and the rear portion 13 of the trap 12 is shaped so that a ball entering a hole 11 will be deflected downwardly within the trap and will not be deflected outwardly back through the hole. The trap 13 can be made of sheet metal or reinforced plastic, or can be made of flexible material, such as fabric.

As shown in FIG. 4, the lower end of the trap 12 defines an outlet 14 which is connected to a conduit or pipe 15. The lower end of the conduit 15 is connected to a return pipe 16 which extends beneath the grade and connects the target device with the pro shop 2. The return pipe 16 can be inclined downwardly so that any golf ball entering the pipe will be returned by gravity to the pro shop. It is contemplated that in place of the gravity return other types of mechanical or pneumatic conveyors can be employed to return the ball from the target device to the pro shop.

Alternately, the return pipe 16 can be eliminated and a collection box or container (not shown) can be located in the lower end of the base 7 with the lower end of the conduit 15 being connected to the box. In this case, any ball passing through the conduit 15 will be

collected in the box located in base **7.** A separate conduit **15** and collection area can be provided for each of the target holes **11** or certain target holes can be connected to a common conduit or collection area.

Positioned in the outlet **14** is a pivotable gate **17** and as the ball moves through the outlet it will pivot the gate upwardly as shown by the phantom lines in FIG. **4.** A suitable switch **18** is mounted in a position to be actuated by the gate as it is pivoted upwardly and the switch will operate in the manner hereinafter described to actuate a signaling device, such as a horn or lights, thereby indicating that a ball has entered one of the target holes.

In addition to the target holes **11,** the spherical target **8** is also provided with a series of openings **19** which are enclosed by plastic or transparent plates **20.** An electric lamp **21** is located behind each of the openings **19** and is engaged with a socket **22** carried by reinforcing beams **23** that extend across the interior of spherical target **8.**

FIG. **6** shows the electrical circuit in which lines **24** and **25** are connected to a source of power and switch **18** is connected in series with the lamp **21.** A horn **26** is shown connected in parallel with lamp **21.** Switch **18,** which is adapted to be closed by the golf ball, can be a time switch, as indicated diagramatically by the timing arrow, and is adapted to open automatically after a predetermined time period.

In operation the golfer will be given or will purchase a bucket or container of golf balls each of which will bear the same marking, such as colors or other indicia which will designate the hitter. As an example, the golf balls in the bucket purchased by one golfer may all bear the number "**17,**" while the balls of the second bucket may all bear the number "**23.**"

Hitting from the target areas **3,** the golfer will aim at one of the target devices **1** and if a ball enters one of the target holes **11** it will pass through the trap **12** to the conduit **15,** thereby pivoting the gate **17** and actuating the switch **18.** Closing the switch **18** will energize the lamps **21,** as well as the horn **26** to provide a signal that a ball has hit a target hole. The ball will then pass through the conduit **15** and the return pipe **16** to the pro shop **2** where the attendant will retrieve the ball to determine the hutter. Alternately, if a collection box is used in the base **7** of the target device, the attendant will retrieve the ball from the collection box to determine the hitter.

Awards or prizes can be given to golfers who hit a ball into one of the target holes **11,** and it is contemplated that the target holes can be of various sizes, with a more expensive award being given for hitting a smaller sized hole. While each target hole **11** can be connected to a separate collection area, the target holes of a similar size, which represent the same award, could be connected to the same collection area.

It is contemplated that certain target holes, regardless of size, could be designated for special awards, and similarly, all target holes representing the same award could be connected to a common collection area.

The present invention will tend to increase the skill of the golfer for he will normally be aiming at a distinct target, as opposed to the normal practice driving range in which the golfer may often just hit at the fairway area without aiming at a particular target.

While the drawings illustrate a target device as associated with a golf driving range, it is contemplated that the target device can be used with any type of ball or flying object.

Various modes of carrying out the invention are contemplated as being within the scope of the following claims particularly pointing out and distinctly claiming the subject matter which is regarded as the invention.

I claim:

1. A target device for receiving flying golf balls, comprising:

a hollow, spherical target having a plurality of target holes disposed in spaced apart relationship on the outer surface of said target, said target holes adapted to receive a flying golf ball;

a plurality of traps within said target each communicating with one of said target holes and having walls which converge downwardly from one of said target holes toward the interior of said target so that a flying golf ball entering one of said target holes will be deflected downwardly within said trap;

a ball collection point connected to an outlet of each of said traps to receive golf balls passing through said traps;

switch means mounted adjacent the outlet of each of said traps and actuated by a golf ball passing through the outlet; and

an electrical signal disposed within said target and actuated by the actuation of said switch means.

2. The target device of claim **1,** wherein said target has a second hole on the outer surface thereof, said electrical signal including a light located behind said second hole.

3. The target device of claim **1,** and including timer means operably connected to said switch means for deactivating said switch means after a predetermined time period to stop operation of said electrical signal.

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