June 22, 1948. J. W. ANDERSON 2,443,759

INDOOR GOLF PRACTICE DEVICE

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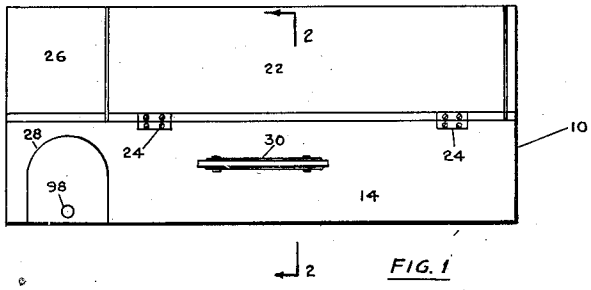


FIG. 1

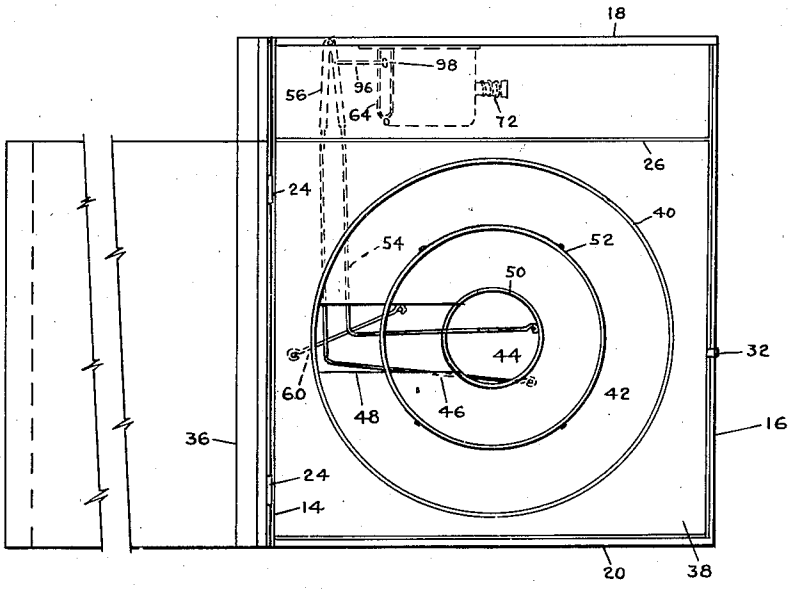


FIG. 3

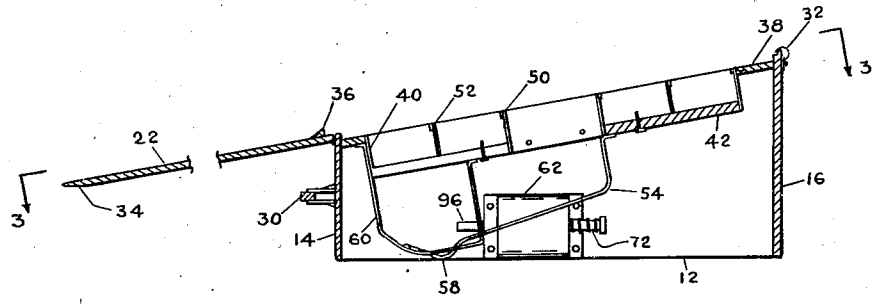


FIG. 2

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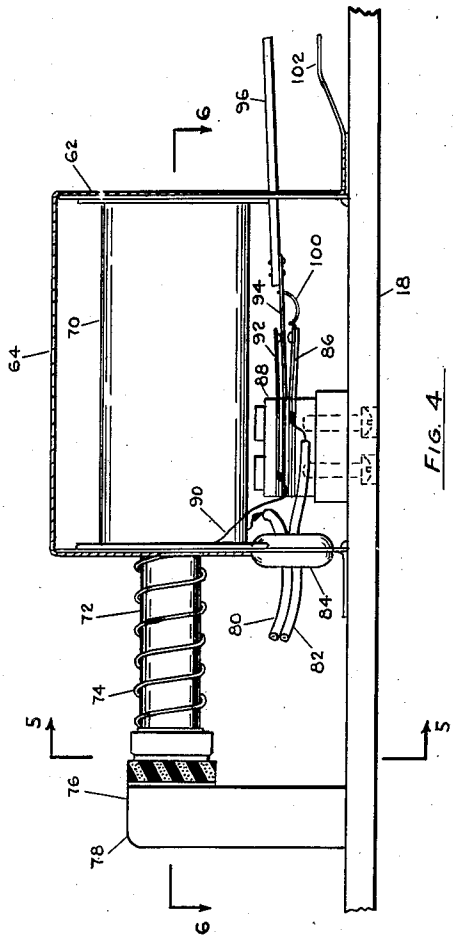


FIG. 4

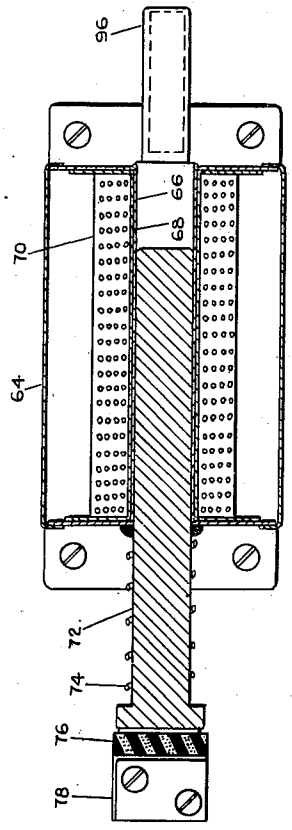


FIG. 6

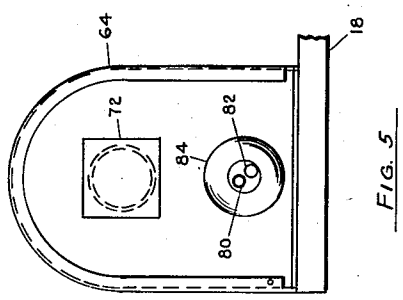


FIG. 5

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UNITED STATES PATENT OFFICE

2,443,759

INDOOR GOLF PRACTICE DEVICE

John W. Anderson, Portland, Oreg.

Application August 9, 1946, Serial No. 689,333

4 Claims. (Cl. 273—35)

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This invention relates to amusement devices, and more particularly to a golf practice device adapted for indoor use.

An object of the invention is to provide a golf game device of the indoor putting practice variety having an automatic positive action ball return.

Another object of the invention is to provide a simulated golf practice device comprising a target having a plurality of receptacles and electrical means associated therewith to impart sufficient kinetic energy to a golf ball received by any of the receptacles to return said golf ball a predetermined distance from the device to the player.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the drawings forming part of this specification, and in which:

Fig. 1 is a view in front elevation of the embodiment of the invention;

Fig. 2 is a view in section along lines 2—2 of Fig. 1 with the cover of the device in open position;

Fig. 3 is a plan view of the device with the cover also in open position;

Fig. 4 is an enlarged view of the electrical ball return means embodied in the invention;

Fig. 5 is an end view in elevation taken along lines 5—5 of Fig. 4; and

Fig. 6 is a view in section taken along lines 6—6 of Fig. 4.

Referring to the drawings for more specific details of the invention, 10 indicates generally a housing comprised of a front wall 14, a rear wall 16 of greater height than the wall 14, side walls 18 and 20 having angularly inclined upper edges, a movable cover 22 secured by hinges 24 to the front wall 14, and an immovable cover 26 secured to walls 14, 16 and 18. The housing has no floor. The front wall 14 has a passage 28 cut therein and a handle 30 is secured to the central portion of said wall to facilitate carrying of the device. A spring clasp 32 secured to the wall 16 is adapted to secure the cover 22 in the closed position of Fig. 1, while the cover 22 is provided with a bevelled end surface 34 to allow the juxtaposition of said end surface with a floor surface. A wedge 36 extending the width of cover 22 is secured thereto for a purpose hereinafter disclosed.

A support panel 38 having a large circular aperture therethrough is secured to the walls 14, 16 and 20 and underlies the cover 22 when the latter is in the closed position. Secured to the

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periphery of the aperture in panel 38 is a circular ring 40 having attached to the lower end thereof a circular panel 42, said panel 42 having a centrally located aperture 44 therethrough and apertures 46 and 48 spaced outwardly from aperture 44 and in radial alignment therewith. A ring 50 is secured to the periphery of aperture 44, while another ring 52 equi-spaced from rings 40 and 50 is secured to the surface of panel 42.

A wire ball track 54 is secured to the underside of panel 42 to underlie the apertures 44, 46 and 48, said track having a right angled turn, as shown, and having a flattened end portion 56 secured to the floor of the housing 10 adjacent the sidewall 18. The track 54 has a downward bend 58 adjacent the right angled turn for a purpose hereinafter described, and a wire support 60 having one end connected to each of the panels 38 and 42 underlies the track 54 at the right angled turn to brace said track.

Secured to the wall 18 is a solenoid assembly indicated generally at 62 comprising a housing 64 supporting a metal sleeve 66 having sheathed thereon a rubber insulation tube 68 supporting a multi-layered coil 70. Movably supported within the sleeve 66 is an armature 72 yieldingly urged by spring 74 to abut a rubber stop member 76 carried by an angle iron member 78 secured to the wall 18.

A pair of wire leads 80 and 82 leading from a wall outlet or the like, not shown, pass through a rubber grommet 84, and are connected, respectively, to the coil 70 and to a switch contact 86 supported by a switch assembly 88 attached to the wall 18. Another lead 90 connects the coil 70 to another switch contact 92. A switch arm 94 supported by the assembly 88 has an extension member 96 of a non-conducting material extending through an aperture 98 in the housing 64 over the track 54, and said arm is connected by a snap action spring 100 to contact 86. The spring 100 normally maintains the contacts 86 and 92 out of engagement. A stop member 102 adapted to limit the movement of extension 96 is secured to the base of the housing 64.

The device is operable in the following manner. The player strokes or putts a golf ball along the floor and up the ramp-like cover 22. The ball rises into the air upon striking the wedge 36 to follow a parabolic path and descent within the space defined by one of the rings 40, 50 and 52. The ball then drops through one of the apertures 44, 46 and 48 onto the track 54, comes to a virtual halt upon reaching the downward bend 58 in said track, and rolls down the track to strike the ex-

tension 96 and cause a deflection of said extension toward the stop member 102 and a consequent snap action of spring 100, just prior to the striking of said stop member by the extension 96, to snap contacts 86 and 92 together to close the solenoid circuit and impel armature 72 inwardly of sleeve 66 against the action of spring 74. The forward end of the armature passes out of the housing 64 to strike the ball which has come to rest on the flattened portion 56 of track 54 in alignment with the armature, said ball also serving to maintain the extension 96 in deflected position. The ball is driven off the track 54 to pass through the aperture 28 in wall 14 and return to the player. As the ball is driven from juxtaposition with the extension 96, the arm 94 provides a spring action to return the extension 96 to a point where the arm 94 and the extension 96 are snapped back to their original position by the snap action spring 100 to separate the contacts 86 and 92, de-energize the coil 70 and allow the armature 72 to be withdrawn by spring 74 to abut the rubber stop member 76. The device is then in readiness for the next cycle of operation.

While the preferred embodiment of the invention has been shown and described, the device is susceptive of modifications within the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. In an amusement device of the ball return type, a target located above floor level, means to receive a ball from the target and convey it to substantially floor level, and power operated impelling means actuated by said ball and operable to project said ball at floor level toward a player located at a distance from said device.

2. In an amusement device of the ball return type, a target, guide means associated therewith

to receive a ball therefrom and convey it to substantially floor level, and electrical means actuated by the ball and movable substantially horizontally to strike the ball and return it to a player remotely located with respect to the device.

3. A golf putting device comprising a target located above floor level, means to convey a rolling ball to the target, means to receive the ball from the target and convey it to substantially floor level, and electrical means energized by the ball to strike said ball and return it linearly to a player located at a distance from the device.

4. A golf putting device comprising a target located above floor level, a ramp to raise a rolling ball from floor level to the target, guide means to convey the ball from the target to substantially floor level, movable switch means in the path of the ball, a solenoid energized by the movement of said switch caused by said ball, an armature movable by energization of the solenoid to impel the ball linearly to a player remotely located from the device, means to snap the switch means to its original position to de-energize the solenoid, and means to return the armature to its original position.

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