Oct. 24, 1933. E. S. RYAN 1,932,049

GOLF PRACTICE GAME

Filed March 7, 1932 2 Sheets-Sheet 1

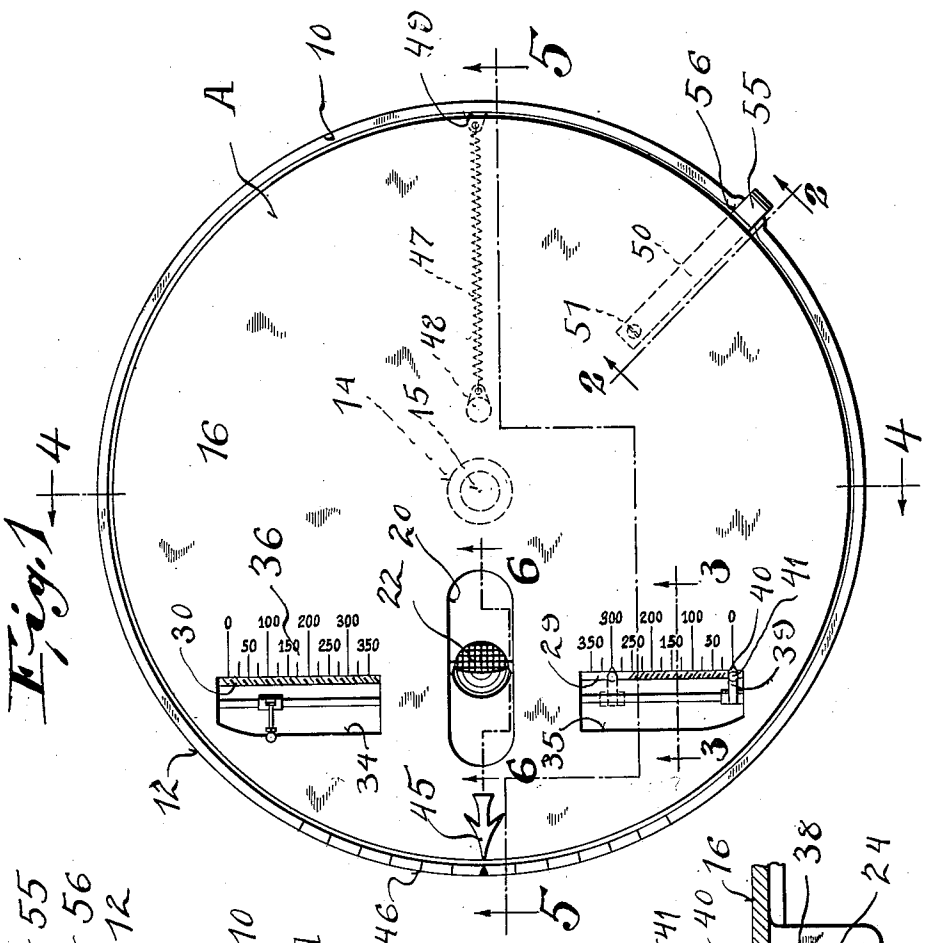


Fig. 1

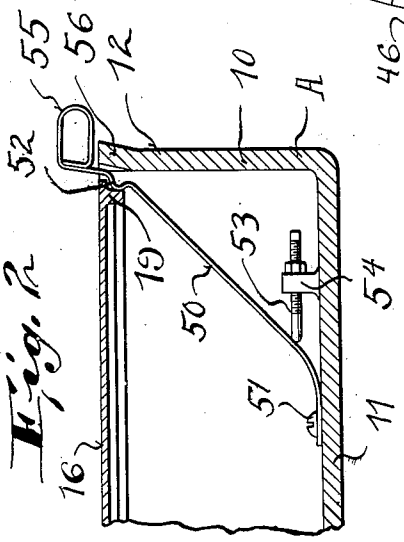


Fig. 2

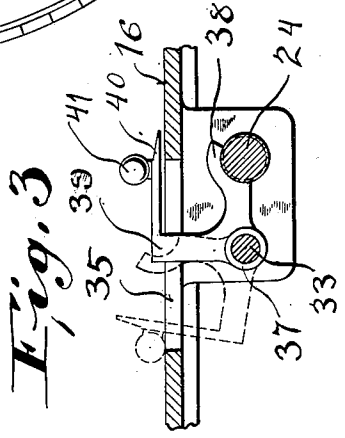


Fig. 3

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Fig. 4

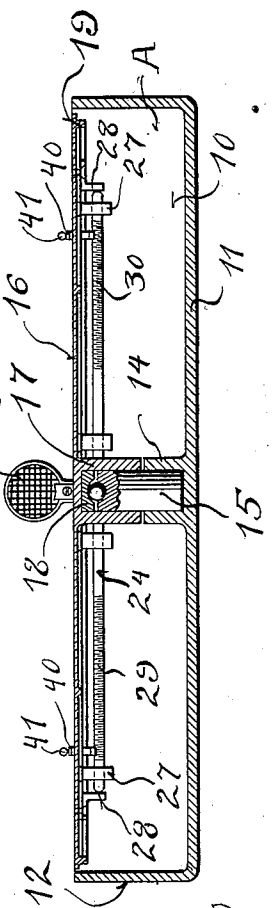


Fig. 5

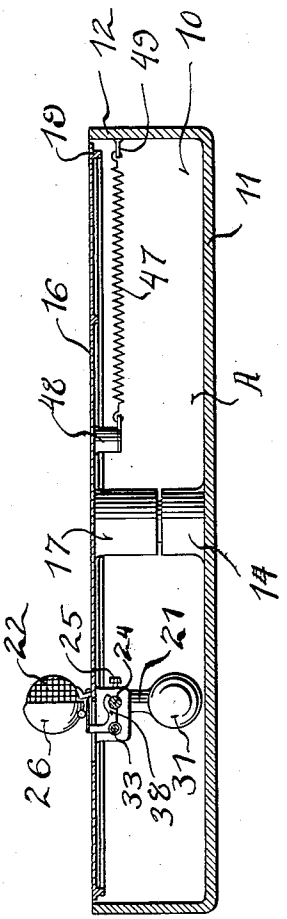


Fig. 6

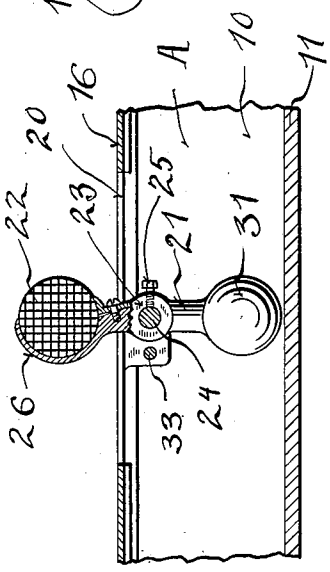
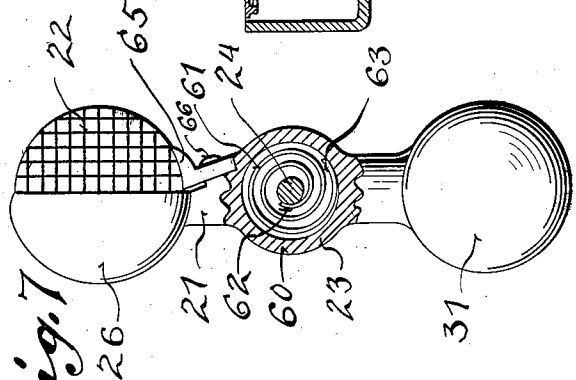


Fig. 7



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GOLF PRACTICE GAME

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2 Claims. (Cl. 273—35)

This invention appertains to game apparatus, and more particularly to an improved golf practice game.

One of the primary objects of my invention is to provide a novel golf game device embodying an anchored ball adapted to be struck by an ordinary golf club, with means for registering the force with which the ball is struck in yards.

Another salient object of my invention is to provide a golf game device having an anchored ball which will automatically return to its driving position after being struck, means being provided for indicating whether or not the ball has been fairly struck, the means registering the amount of slice, hook, etc., when the ball has not been properly played, thereby allowing the player to correct his stroke or swing.

A further important object of my invention is to provide a golf practice device, which can be played by more than one person, so as to permit the device to be used as a competitive game, means being operatively connected with the ball for indicating the force with which the ball is struck and the amount of hook, slice, etc.

A further object of my invention is the provision of a golf practice game, embodying a circular casing having rotatably mounted thereon, a turn table, with a ball connected with a bracket rotatably mounted on the table, the table carrying registering devices for indicating the force with which the ball is struck, the means for mounting the ball on the table allowing the table to turn in either direction for indicating the amount of hook or slice, if the ball has not been fairly struck.

A further object of my invention is the provision of means for normally holding the table with its ball in a predetermined position on the casing, with means for creating a drag on the table for holding the same against backward turning movement under influence of said means, when the table has been moved by the inaccurate striking of the ball, so that the exact amount of slice or hook can be seen by the player.

A further object of my invention is the provision of novel means for operating the registering device for indicating yardage from the rotation of the ball carrying bracket, said means being of such a character as to permit the free and easy resetting thereof, each time the ball has been struck by the player.

A still further object of my invention is to provide a golf practice game of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a top plan view of my improved golf practice game;

Figure 2 is a detailed fragmentary sectional view taken on the line 2—2 of Figure 1, looking in the direction of the arrows, illustrating the means for creating a drag on the turn table;

Figure 3 is an enlarged detailed fragmentary section taken on the line 3—3 of Figure 1, looking in the direction of the arrows, illustrating a part of the registering mechanism.

Figure 4 is a diametric section through my improved golf practice device taken on the line 4—4 of Figure 1, looking in the direction of the arrows;

Figure 5 is a section taken at right angles to Figure 4 on the line 5—5 of Figure 1, looking in the direction of the arrows;

Figure 6 is an enlarged detailed section taken on the line 6—6 of Figure 1, looking in the direction of the arrows, illustrating one means of mounting the ball carrying bracket on the indicator shaft, and

Figure 7 is an enlarged detailed view illustrating another and modified form of means for connecting the ball carrying bracket on the recording shaft.

Referring to the drawings, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my improved golf practice device. This device embodies a circular housing 10 having a flat disc-shaped body wall 11 and an upstanding annular side wall 12. This housing 10 is preferably formed from metal having a light weight, such as aluminum. Formed axially on the bottom wall 11 is an upstanding boss or socket 14, supporting the pivot shaft 15.

Mounted upon the pivot shaft 15 is a turn table 16 which closes the top of the casing 10. If desired, the turn table 16 can be formed of aluminum or any other preferred material. The axial center of the turn table 16 is provided with a depending bearing sleeve 17 which receives the upper end of the bearing shaft 15. A ball thrust bearing 18 can be interposed between the upper end of the bearing shaft 15 and the bearing sleeve 17.

The turn table 16 adjacent to its periphery is

provided with a depending reinforcing rib 19, which also acts as a brake drum as will be hereinafter more fully set forth. A radially extending slot 20 is formed in the turn table 16 between the axial center thereof and the periphery of the table, and this slot receives the bracket 21 for supporting a golf ball 22. The bracket at a point equally distant from its ends has formed thereon, a hub 23, which receives the indicator shaft 24. The hub can be secured to the indicator shaft in any preferred way, such as by the use of a set screw 25. One end of the bracket is provided with a substantially semi-spherical shell 26 for receiving the golf ball 22, and the ball is retained in the shell against displacement. The indicator shaft 24 is freely mounted for rotation in suitable bearings 27 carried by the inner face of the turn table 16. If desired, depending thrust bearing brackets 28 can be carried by the table 16 for engaging the terminals of the indicator shaft. The shaft on each side of the bracket 21 is provided with left and right hand threads 29 and 30, respectively, and the shaft 24 performs the function of a feed screw, for a purpose, which will also be hereinafter more fully described.

One end of the rotating bracket 21 is provided with a spherical knob 31 which acts in the nature of a weight for normally holding the ball 22 uppermost above the surface of the turn table and in a position to be struck by a golf club.

Obviously, by the description so far, when the ball is forcibly struck, the same will be rapidly rotated, causing the turn of the shaft 24 in its bearings.

I provide a novel means for registering the force with which the ball is struck and this registering means is properly calibrated, so that the revolutions of the ball are translated upon the registering device in yards. This registering or indicating device includes a guide rod 33 arranged in front and in spaced parallel relation to the feed screw or recording shaft 24. This guide rod 33 can be supported by the bearings 27, if so desired. On each side of the radial slot 20, the turn table 16 is provided with laterally extending slots 34 and 35, through which can be seen the threaded portions 29 and 30 of the feed screw or recording shaft 24. One edge of the slots 34 and 35 is calibrated as at 36, to indicate yards as heretofore mentioned.

Slidably mounted upon the guide rod 33 on each side of the slot 20 is a bearing sleeve 37 carrying a fragment of a feed nut 28 for engaging the threaded portions of the shaft 24. Each of the slide bearing sleeves 37 carry an upwardly extending angular arm 39 having a pointer 40 which is adapted to rid over the calibrations or indicating marks 36.

The indicating arms or pointers 40 carry finger knobs 41, whereby the feed nut portions 38 can be raised above the shaft 24, so as to permit the manual sliding of the feed nuts and their pointers back to their normal positions, after the pointers have been fed over the indicating marks incident to the engagement of the feed nuts with the feed screw during the rotation of the feed screw.

Initially, when the ball is struck, one of the pointers or indicating fingers 40 is disposed at the zero mark on its scale and the other pointer can be swung back to the dotted line position shown in Figure 3, so that the feed nut of the last mentioned pointer will be out of engagement with the threaded portion of the shaft. When the ball is hit by the golf club, the ball bracket will be rotated, causing the turning of the shaft and the pointer or indicating finger will be fed along the shaft over the scale indicating the number of yards the ball has been driven.

Where two players are utilizing the device in sportive competition, one player will use one indicating device on one side of the slot 20, and the other will use the indicating device on the opposite side of the slot 20.

As heretofore intimated, I have provided means for indicating the amount of slice or hook, when the ball is not properly hit by the golf club. This means includes an indicating arrow or pointer 45 formed on the turn table 16 adjacent to its periphery directly in front of the slot 20. This pointer cooperates with graduations 46 formed on the upper edge of the side wall 12 of the casing 10.

In order to normally hold the turn table centralized on the casing, I can provide a contractile coil spring 47 having its terminals connected respectively to a lug 48 formed on the bottom of the turn table and a lug 49 formed on the inner face of the wall 12 of the casing.

When the turn table 16 has been moved incident to the improper striking of the ball, I provide means for preventing the return of the turn table under influence of the spring 47, so that the amount of slice or hook can be readily seen by the player. This means includes a leaf spring 50. The inner end of the leaf spring 50 is anchored, as at 51, to the bottom wall 11 of the casing 10 and the spring extends upwardly between the periphery of the turn table and the inner edge of the side wall 12 of the casing. The spring 50 is normally urged, due to its inherent resiliency, toward the rib 19 on the turn table, and in order to insure the proper engagement of the spring with the rib, the spring can be provided with an inwardly directed offset 52 for bearing against the rib. This creates a drag on the turn table to hold the same against movement. The tension of the spring can be regulated by means of an adjusting rod 53 carried by a bracket 54 on the bottom wall 11 of the casing. The upper end of the spring which protrudes beyond the upper edge of the casing can be provided with a handle 55, so as to permit the depression of the spring either by the foot or hand, so that the offset 52 can be moved away from the rib 19 of the turn table and thereby permit the turn table to return to its normal position by the spring 48. The upper edge of the side wall 12 of the casing can be slightly struck out to provide a guide 56 for the spring, if found necessary or desirable.

In Figure 7, I have illustrated another and preferred form of means for mounting the ball carrying bracket 21 on the shaft or feed screw 24. In this form, I provide the bracket 21 with a hollow hub 60 and this hub 60 receives a coil spring 61. One terminal of the spring 61 can be anchored, as at 62, to the shaft 24 and the other end of the spring can be anchored. as at 63, to the inner face of the hub. The spring will tend to eliminate the initial resistance between the ball and shaft when the ball is hit by the club.

Any desired means can be provided for holding the ball 22 in the semi-spherical socket 26, but as shown in Figures 6 and 7, I provide a holding plate 65, which is secured to the socket by means of a fastening screw 66. The holding plate 65 is such a character as to force and hold the ball against the whole of the socket.

From the foregoing description, it can be seen that I have provided an exceptionally simple form

of practice golf game, which will effectively give the player an accurate showing of his golf form, the device being of such a character as to permit the use thereof in restricted or confined areas.

Changes in details may be made without departing from the spirit or the scope of my invention, but what I claim as new is:

1. In a golf practice game device, a base, a turntable rotatably mounted on the base, means for rotatably supporting a golf ball on the turntable radially of the axis of the turntable, the base having a scale in front of the turntable, a pointer on the turntable for cooperating with the scale, and a resilient connection between the turntable and base for normally holding the ball and the pointer in a predetermined position relative to the scale, and a drag brake for the turntable for holding the same against movement after being turned, said drag brake including a leaf spring carried by the base, a depending annular rib on the turntable, an offset on the spring for engaging the rib, and means for moving the spring out of engagement with the rib.

2. In a golf practice game, a base having a central slot, a rotatable shaft carried by the base extending across the slot having oppositely directed threads formed thereon adjacent to its opposite ends, a support secured to the shaft for rotation therewith, a ball carried by one end of the support, a weight carried by the opposite end of the support and normally holding the ball in a raised position through the slot above the upper face of the base, the base being provided with slots on each side of the central slot, a guide rod secured to the base extending in spaced parallel relation to the shaft, the base being provided with scales adjacent to one edge of the last mentioned slots, a travelling nut slidably mounted on the guide rod on each side of the transverse center thereof for longitudinal and rotary movement, a pointer carried by each nut for cooperation with a scale plate, means on the travelling nuts for moving the nuts into and out of engagement with the threaded portions of the shaft, as and for the purpose specified.

EDWARD S. RYAN.