May 22, 1928. 1,670,409

J. HANSEN

MECHANICAL GOLF INSTRUCTOR AND EXERCISER

Filed Oct. 14, 1926 2 Sheets-Sheet 1

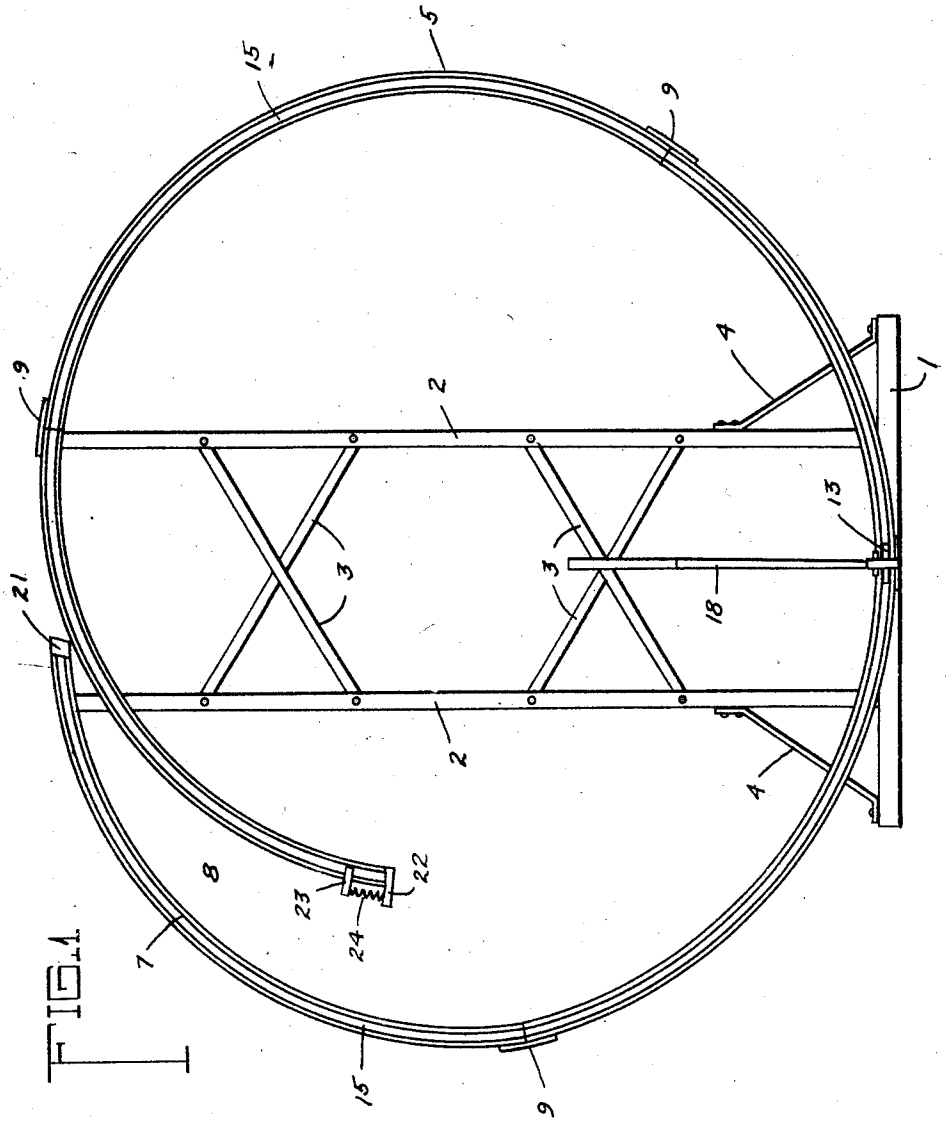


FIG. 1.

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FIG. 2

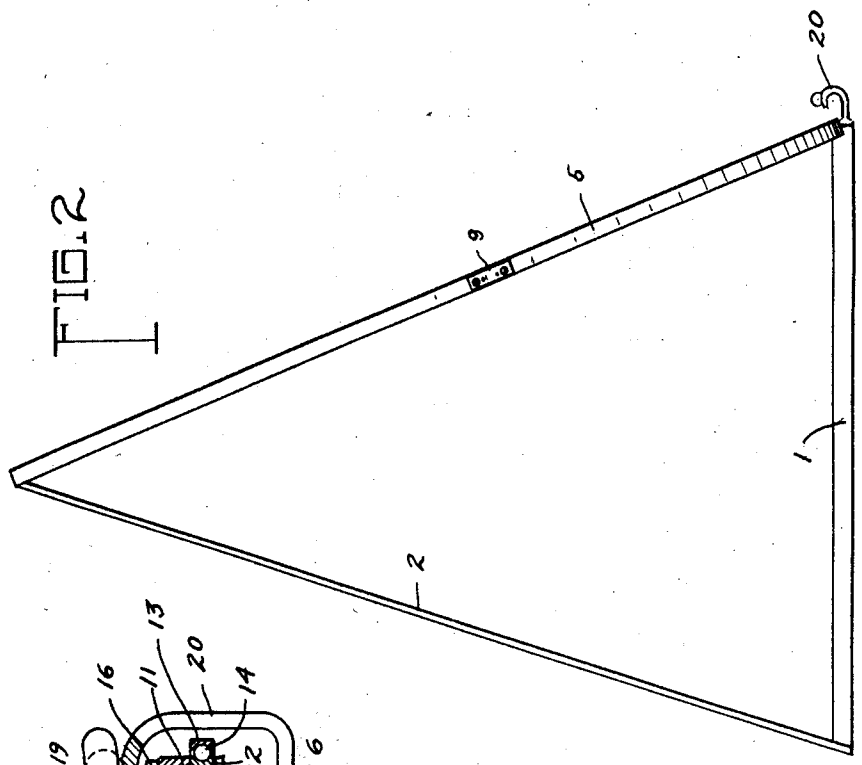


FIG. 3

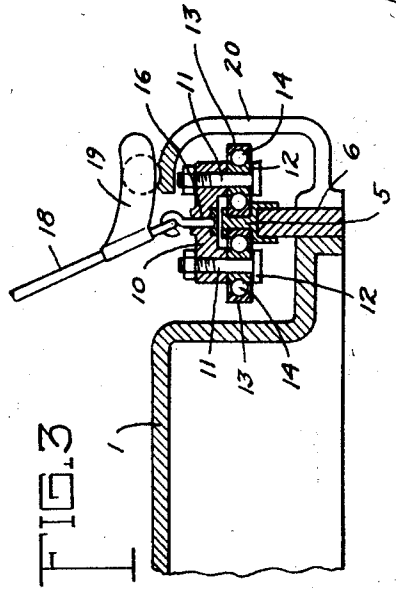
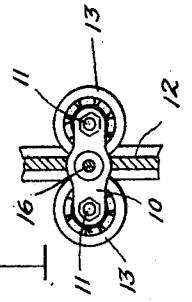


FIG. 4



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Patented May 22, 1928. 1,670,409

UNITED STATES PATENT OFFICE.

JOHN HANSEN, OF BETTENDORF, IOWA, ASSIGNOR, BY MESNE ASSIGNMENTS, OF TWENTY-FIVE AND ONE-THIRD ONE-HUNDREDTHS TO WILLIAM H. MARTIN, FORTY-NINE AND ONE-THIRD ONE-HUNDREDTHS TO T. S. CUNNINGHAM, AND ONE AND ONE-THIRD ONE-HUNDREDTHS TO THOMAS McQUARRIE, ALL OF DAVENPORT, IOWA.

MECHANICAL GOLF INSTRUCTOR AND EXERCISER.

Application filed October 14, 1926. Serial No. 141,438.

My invention has reference to a mechanical golf instructor and exerciser, and has for its chief purpose to provide a means whereby a golf player may be enabled to perfect his stroke with a golf club, by practice, and thereby reduce the number of strokes required in actual play. This is accomplished by providing a rigid guide or track for the head of a golf club, which will permit of the making of a complete stroke with the club.

Another purpose thereof is to provide a mechanism which can be used in-doors in inclement or cold weather, which will enable the user to keep in practice at such times, and which will also serve to provide the player with a great part of the exercise which accompanies the playing of a game of golf.

Another object of the invention is to provide a means for guiding the club which will be practically free from friction, and which will permit the club to turn in the usual manner when in play.

Another feature thereof consists in a support for a golf ball, to hold the same in position so as to be hit by the head of the club in the usual way, and driven for a distance or into a net, as may be desired.

The above mentioned, and other features and advantages of the invention will more fully appear from the following specification, taken in connection with the accompanying drawings, in which:

Fig. 1 shows the invention in front elevation.

Fig. 2 is a side view thereof.

Fig. 3 is a section through the track and traveller operable thereon.

Fig. 4 is a plan view of the traveller which operates on the track 5.

The reference number 1 indicates a base of sufficient size to support a person, from which base is supported a frame comprising a pair of parallel side pieces 2, united by pairs of cross-pieces 3. At their lower ends the pieces 2 are further supported by braces 4. A track 5 is supported by the base 1 and frame 2, the lower part of the track being attached to a block 6 connected with the base, and the upper part secured to the frame pieces, near their upper ends. The track is of substantially oval form, and is provided with one end 7 and an overlapping end 8. For convenience in handling, the track is formed in two or more sections, at the joints of which are splices 9, secured to the track on the outer face thereof.

Designed for operation on said track is a traveller formed of a plate 10, fixed in the ends of which are pins 11, forming supports for anti-friction devices consisting of hubs 12, fixed on the pins 11, and rims 13, separated from the hubs by series of balls 14. Said rims are adapted to travel in channels 15 in the opposing faces of the track. Centrally of the plate 10 is a pivot pin 16, the upper end of which is formed into a hook to receive an eye 17 on the end of a stick 18, of the type and size of an ordinary golf club. This stick may be used in its simple form as a propelling means for the traveller, or it may be fitted with a head 19, in semblance of a driver or other golf tool, and a golf ball may be supported near the lower part of the track, and in the line of travel of the head 19, by means of an arm 20, attached to the block 6, and forming a tee for the ball.

The track 5 is preferably mounted in an inclined position, as shown in Fig. 2, the player standing on the base 1 and centrally of the track, with the head projecting through the same, so that the sweep of the club upwardly will carry the head thereof to the rear of the player. The end 7 of the track is closed by a stop 21, and at the other end of the track is an end piece 22 and buffer plate 23, connected with the end piece by a coiled spring 24. In using the device the stick or club is brought upwardly in the manner of starting a stroke, the traveller coming into contact with the stop 21. The club is then brought downwardly in the opposite direction, the movement being limited by the shape and size of the track, until the plate 10 of the traveller encounters the buffer 23, whereupon the stroke ends. The movement of the end of the stick and traveller attached thereto corresponds exactly with the correct and efficient stroke to be desired in playing the game of golf, and the action of the player is controlled thereby to such an extent as to greatly in-

crease his efficiency in driving the ball. By continued practice he will soon become accustomed to the proper stroke, and will continue the same without the use of the track.

In the true movement of a club in making a stroke there is a variation in the position of the club, which makes a quarter-turn from a position at the right of the player to the ground, and another quarter-turn from the ground to a corresponding point at the left of the player. When the club is raised to the top of the track, as in beginning the stroke, the face of the club is to the front, and continues in this position until about half way to the ground, when the club begins to make a turn so as to bring the face thereof toward the left of the player, in position for hitting the ball. In its upward movement again the club is turned until its face is toward the rear, which position it maintains for the balance of the stroke. It is therefore essential that there shall be nothing to interfere with this action of the club, which would result in a distorted and un-natural stroke. This is provided for in the present instance by the pivotal connection of the club with the traveller, permitting the club to turn freely in either direction.

To suit the device to persons of different heights and lengths of arms the track may be made in different sizes, and the sticks 18 of lengths to correspond. As at present known to the trade there are but three standard lengths of clubs for all occasions.

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

1. A device of the class described, comprising a base, a track mounted thereon and having overlapping ends at its upper part, a stop in one of said ends, a buffer in the other of said ends, an anti-friction guiding device movable on said track, and a stick connected with said guiding device so as to have a free axial movement.

2. A track supported in a plane at a desired angle with the ground and of an eccentric form corresponding with the movement of the head of a golf club in making the customary stroke, and a club guiding member movable along said track with a minimum of resistance, and provided with a coupling means with the end of a golf club permitting free axial movement to the club in the operation thereof.

In testimony whereof I affix my signature.

JOHN HANSEN.