July 19, 1955 J. A. PLUNKETT ET AL 2,713,491

GOLF CLUB GUIDING DEVICE

Filed April 2, 1952

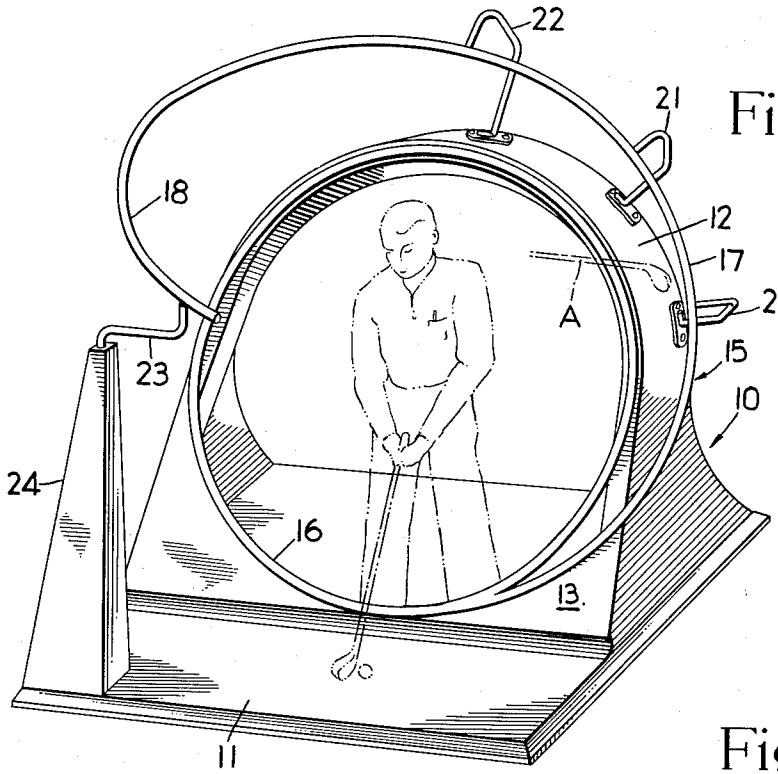


Fig. 1.

Fig. 2.

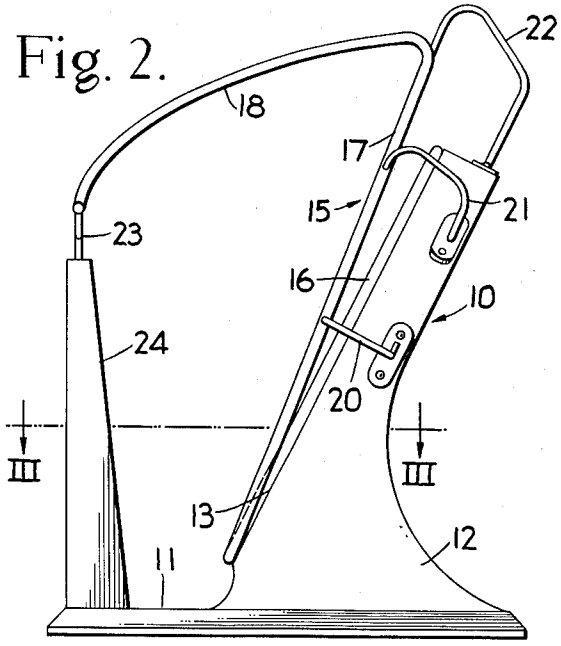
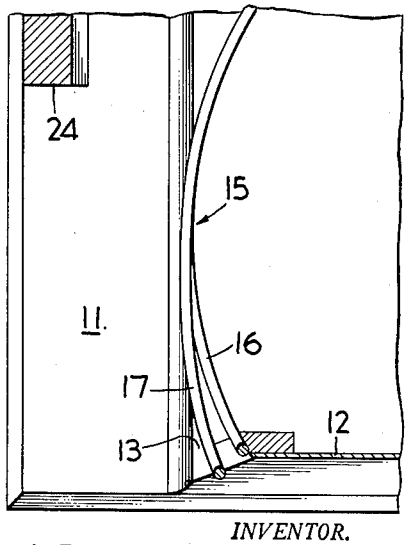


Fig. 3.



INVENTOR.

JOHN A. PLUNKETT AND EUGENE R. DORSO

BY

Beau, Brooks, Buckley & Beau.

ATTORNEYS

United States Patent Office 2,713,491 Patented July 19, 1955

2,713,491

GOLF CLUB GUIDING DEVICE

John A. Plunkett and Eugene R. Dorso, Niagara Falls, N. Y.

Application April 2, 1952, Serial No. 280,042

7 Claims. (Cl. 273—191)

This invention relates to athletic game or practice apparatus and more particularly to a device for use in practicing or executing correct golf strokes.

A wide variety of mechanical appliances and apparatuses have heretofore been proposed for supposedly guiding the head or shaft of a golf club in the execution of correct golf strokes; the general underlying idea being that repeated execution of such strokes with the club, or at least the club head, moving in what is understood to be the correct arc of movement, will train the user in proper stroke execution.

Thus far the various prior art proposals have generally failed to meet with any marked degree of public acceptance. Apart from the matter of expense and complexity of construction, most of these prior art proposals have had inherent in them the objection that the club or club head is mechanically guided in such a way that the normal balance or "feel" of the club is destroyed or at least altered or modified to such an extent that, not only are the theoretical benefits of the stroke training not realized, but actually harmful net effects are suffered.

The unnatural external "drag" imposed generally by club head guiding devices heretofore proposed renders the strokes executed during use of the device artificial and subject to force influences not present during normal golf strokes. Because of frictional resistance and other extraneous forces strokes made with such prior devices are unnatural and artificial and do not truly simulate actual conditions encountered in executing a free and natural golfing stroke.

The present invention provides a golf stroke guiding device which imposes a minimum of restraint on the user and permits him to execute an entirely natural swing during which he experiences the normal "feel" of the club and the various forces acting thereon under normal circumstances. Accordingly, after using the device of the present invention in practice or otherwise, a user can proceed to execute similar strokes without the use of the device and under substantially the same conditions which he experienced in practice with the device.

According to the present invention means are provided which guide the club in the theoretically correct path of movement but permit the club head to move unrestrictedly in the direction of extent of the club shaft and which permits any movement of the club outwardly or away from the user. It has been found that most if not all involuntary tendencies of incorrect swinging involve deviations of stroke inwardly or toward the user and the device of the present invention is designed and arranged to prevent incorrect tendencies in this direction without imposing any restraint on free swinging excepting only when such tendencies evidence themselves.

The device of the present invention is also particularly adapted to be used when balls are actually being struck during practice strokes, the player or user being free to place the ball and address the same without hindrance, either physical or visual. The ball is also clearly and

unobstructedly in the view of the player during the actual stroke and to all main intents and purposes the player is operative in a free and unfettered manner excepting when certain common maladjustments in his swing come into the picture.

While various mechanical modifications may be made without departing from the underlying principles of the present invention, a single complete embodiment is illustrated in the accompanying drawing and is described in the detail in the following specification. It is to be understood, however, that such embodiment is by way of example only and that the invention is not limited in scope excepting as defined in the appended claims.

In the drawings:

Fig. 1 is a general perspective view of one form of the device of the present invention;

Fig. 2 an end elevational view thereof viewed generally from the right as seen in Fig. 1;

Fig. 3 is a fragmentary cross sectional view on the line III—III of Fig. 2.

In the several figures of the drawing like characters of reference denote like parts and the numeral **10** designates generally a framing structure or support for the club guide proper. In the illustrated instance the entire structure is supported upon and fixed to a base or platform **11** although, if portability or movability is of no importance, the device may be supported on and secured directly to a building floor or the like without employing a separate base or platform.

In the form of the invention shown in the drawing, the framing structure or support includes an inverted U-shaped member **12** in the form of an arch having its opposite lower ends secured to base **11**. A front wall member **13** extends across the lower portion of arch **12** and the upper edge of front wall member **13** is inwardly arcuate to complement the upwardly arched contour of U-shaped member **12** and provide a generally circular front opening as clearly shown in Fig. 1.

The front marginal portion of the circular opening thus formed provides a support for a generally circular portion of a continuous club guiding rail which is designated generally **15** in the drawing. This circular portion of the club guiding rail is designated **16** and has extending tangently therefrom a rail portion **17** of generally spiral extent which has a curvature of more or less constantly and progressively increasing radius, beginning at the point where it diverges tangently from the circular portion **16**.

The circular portion **16** of guide rail **15** lies generally in a single plane and is preferably fixed rigidly against front wall **13** and the front upper portion of U-shaped member **12** in any desired manner. The diverging rail portion **17**, in addition to its broader curvature as viewed from the front, extends forwardly from the plane of the circular portion **16** as shown in Fig. 2. This forward divergence is generally flat and regular for a considerable portion of its extent, up to about top dead center thereof, then terminates in a much more sharply forwardly curved portion **18**.

The rail portion **17** is supported by a series of brackets **20**, **21** and **22** which are fixed to the arched upper portion of member **12** and are themselves upwardly arched to guard against accidental contact with a golf club if the latter is swung behind rail portion **17** by mistake or through carelessness.

The most forward terminal portion of the forwardly curved portion **18** of the guide rail is supported by a bracket **23** which extends rigidly from a post **24**, which in the illustrated instance is fixed to base **11**. The meeting or joining portions of the rail portions **16** and **17** may be welded or otherwise arranged to merge smoothly so that a club shaft will ride smoothly in a

counterclockwise direction from the rail portion 16 to the rail portion 17.

In operation the user addresses the ball as indicated in dot and dash lines in Fig. 1 and executes his back swing with the lower part of the club shaft riding against the generally circular portion 16 of the guide rail until, in executing a full swing, the lower part of the club may assume approximately the position indicated in dot and dash lines at A in Fig. 1. The down swing re-traverses this path, with the lower part of the club shaft still riding against portion 16 of the guide rail, and after the ball is struck the portion of the club shaft just above the club head passes to the rail 17 and rides therealong throughout the follow-through portion of the stroke.

What is claimed is:

1. In a golf club guiding device, a rigid guide rail for frictional engagement with a lower rear surface portion of a golf club shaft, and means for rigidly supporting said guide rail, said guide rail including a circular portion disposed in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane, and a terminal guide rail portion comprising a curving continuation of said tangently extending portion beginning adjacent to the top thereof and extending forwardly and curving in a direction approaching the direction of stroking.

2. In a golf club guiding device, a rigid guide rail for frictional engagement with a lower rear surface portion of a golf club shaft, and means for rigidly supporting said guide rail, said guide rail including a circular portion disposed in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane.

3. In a golf club guiding device, a guide rail element extending in the curved path described by the lower shaft portion of a golf club during a correct full swing, said guide rail element being disposed at the rear side of said curved path to prevent deviation of the club shaft toward such side, and a support including means engaging said guide rail intermittently along its length, said guide rail including a circular portion disposed in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane.

4. In a golf club guiding device, a guide rail element extending in the curved path described by the lower shaft portion of a golf club during a correct full swing, said guide rail element being disposed at the rear side of said curved path to prevent deviation of the club shaft toward such side, and a support including means engaging said guide rail intermittently along its length, said guide rail including a circular portion disposed in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane, and a terminal guide rail portion comprising a curving continuation of said tangently extending portion beginning adjacent to the top dead center thereof and extending forwardly and curving in a direction approaching the direction of stroking.

5. In a golf club guiding device, a rigid guide rail for frictional engagement with a lower rear surface portion of a golf club shaft, and means for rigidly supporting said guide rail, said guide rail including a circular portion disposed in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane, and a terminal guide rail portion comprising a curving continuation of said tangently extending portion beginning adjacent to the top dead center thereof and extending forwardly and curving in a direction approaching the direction of stroking, said supporting means including rigid means rearwardly of the plane of ball flight for supporting the circular and spiral portions of the guide rails and a vertical post spaced forwardly of said plane of ball flight for supporting the forward terminal portion of the guide rail.

6. In a golf club guiding device, a rigid guide rail for frictional engagement with a lower rear surface portion of a golf club shaft, and means for rigidly supporting said guide rail comprising a rigid inverted U-shaped supporting frame, said guide rail including a circular portion disposed against said supporting frame in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane.

7. In a golf club guiding device, a rigid guide rail for frictional engagement with a lower rear surface portion of a golf club shaft, and means for rigidly supporting said guide rail comprising a rigid inverted U-shaped supporting frame, said guide rail including a circular portion disposed against said supporting frame in an upright rearwardly inclined plane and a portion extending tangently therefrom adjacent to the base of said circular portion in the direction of stroking and in a widening spiral path progressing forwardly of said inclined plane, and a vertical supporting post spaced forwardly of said U-shaped supporting frame for rigidly supporting the forward terminal portion of said guide rail.

References Cited in the file of this patent

UNITED STATES PATENTS

1,670,409	Hansen	May 22, 1928
1,944,942	McDonald	Jan. 30, 1934
1,960,787	MacStocker	May 29, 1934
2,205,287	Plunkett et al.	Aug. 29, 1950