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L. M. TRAPP

2,695,175

GOLF PRACTICE DEVICE

Filed Dec. 3, 1951

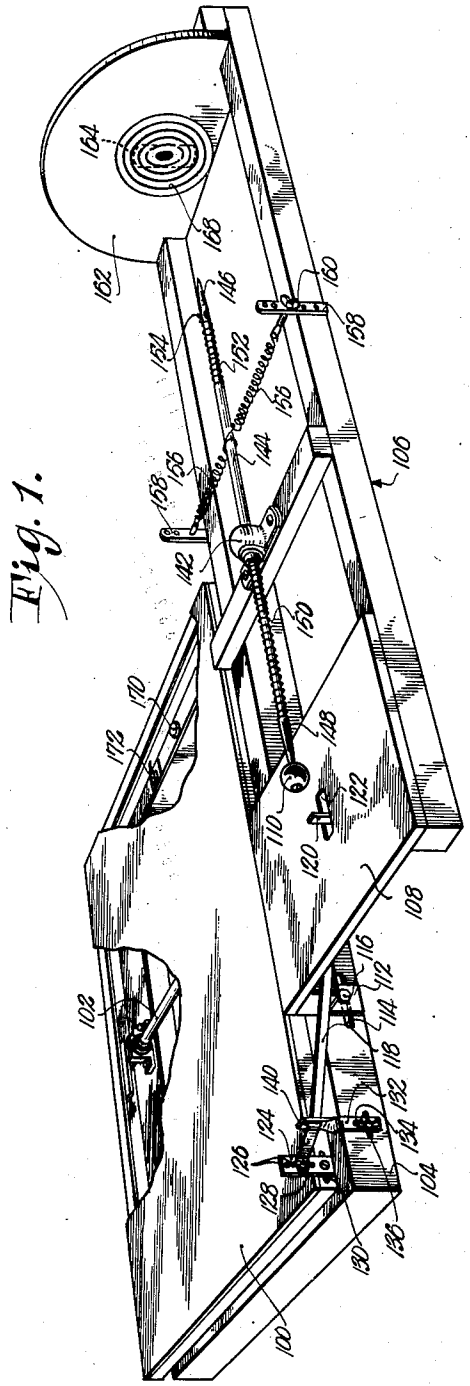


Fig. 1.

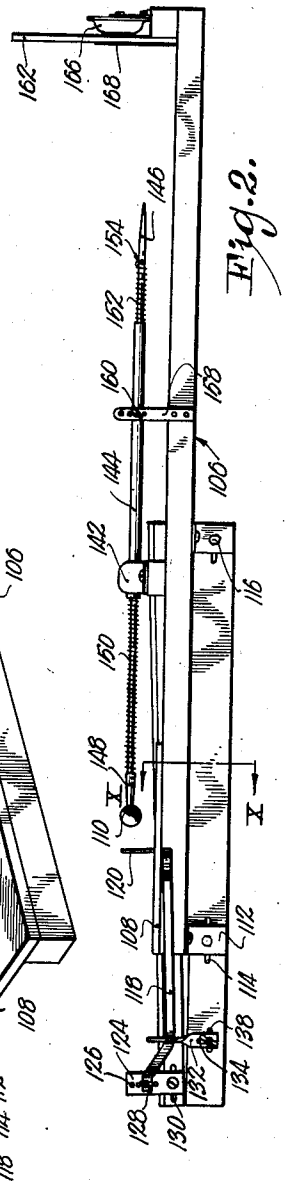


Fig. 2.

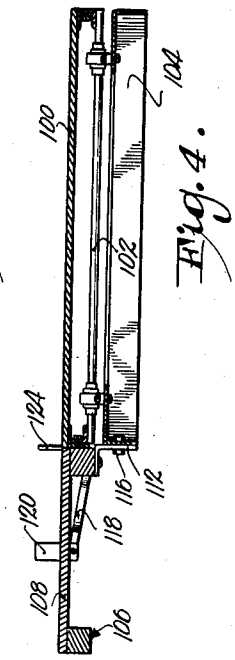


Fig. 4.

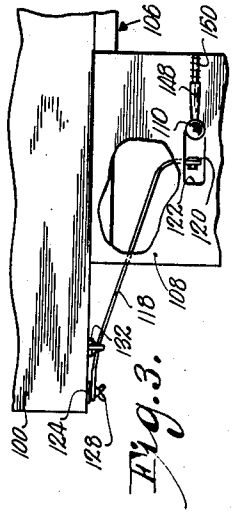


Fig. 3.

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GOLF PRACTICE DEVICE

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2 Claims. (Cl. 273—196)

This invention relates to the sporting field, the primary object being to provide a practice device of the kind having to do primarily with the game of golf and adaptable for use in the aid of stances or posture on the part of the player whereby to teach the imperfections in weight distribution as the ball is struck.

It is the most important object of this invention to provide in connection with a tiltable platform, means within the path of travel of the club that must be retracted by proper weight distribution before the ball can be struck by the player.

It is an important object of the present invention to provide a golf practice device having a tiltable platform representing a teeing station upon which the player stands and having means for automatically retracting a flexible finger from behind a golf ball when the platform is tilted in one direction, so that, it can be determined from the position of the finger whether or not the body weight is properly balanced at the moment of striking the ball.

Another object of the present invention is to provide a golf practice device having balance-determining means as above set forth, together with structure for additionally indicating hooks, slices, lofting or grounding.

Other objects of the present invention include the way in which the ball is mounted on one end of an elongated shaft whereby hook and slice are indicated through deflection of the other end of the shaft; and more minor objects, including details of construction, all of which will be made clear or become apparent as the following specification progresses, reference being had to the accompanying drawing, wherein:

Figure 1 is a perspective view of the golf practice device embodying the present invention, parts being broken away for clearness.

Fig. 2 is a side elevational view of the device shown in Fig. 7.

Fig. 3 is a fragmentary, top plan view thereof.

Fig. 4 is a cross-sectional view taken on line X—X of Fig. 8.

Referring now to the accompanying drawing, a player-supporting platform **100** is swingable on a horizontal axis through the medium of a transverse shaft **102** pivotally carried by a support **104**. A frame **106** associated with the platform **100**, and secured to the support **104**, has a small platform **108** over which a ball **110** is normally disposed.

The frame **106** is adjustable relative to the support **104** through the medium of a pair of L-shaped brackets **112** and slots **114** extending longitudinally of the support **104** and adapted to receive bolt and nut fastening means **116**. It is to be preferred that the brackets **112** hold the frame **106** with the platforms **100** and **108** normally flush at the uppermost surfaces thereof, i. e. when platform **100** is substantially level.

An elongated arm **118** partially underlies the platform **108** and is provided with an upstanding, flexible finger **120** on one end thereof that extends upwardly through an elongated slot **122** formed in the platform **108**. The opposite end of the arm **118** is secured to the tiltable platform **100** through the medium of an upstanding plate **124** that is in turn secured to the platform **100**.

A vertical series of openings **126** in the plate **124** adjustably receive bolt and wing nut fastening means **128** for the arm **118**. The platform **100** is slotted longitudinally as at **130** to adjustably receive the plate **124**.

A fulcrum bar **132** for the arm **118** has a vertical slot **134** for receiving wing nut-bolt fastening means **136** that

also passes through a longitudinal slot **138** formed in the support **104**. An elongated opening **140** in the fulcrum member **132** receives the arm **118**.

A pivotal mounting or bearing **142** carried by the frame **106** has a tube **144** secured thereto and, an elongated rod **146** is telescoped within the tube **144** for free reciprocable movement therein. The bearing device **142** is of conventional character and may be purchased on the open market. It is of a nature to permit swinging movement of the tube **144** and accordingly, of the rod **146** in a plurality of directions. Golf ball **110** is mounted upon one end of the rod **146**, the latter having a shoulder **148** for receiving one end of a spring **150** that is coiled about the rod **146** between the shoulder **148** and the bearing means **142**.

A second spring **152** is coiled about the rod **146** near the opposite end thereof and is disposed between the proximal end of the tube **144** and a cross-pin **154** carried by the rod **146**.

A pair of coil springs **156** connected to the tube **144** intermediate the ends thereof, extend from tube **144** in opposite directions and are connected by upstanding, perforated brackets **158** carried by the frame **106**. Nut and bolt means **160** on each spring **156** respectively, selectively pass through any one of the several perforations of the brackets **158** to permit adjusting of the height of the springs **156** and accordingly, of the tube **144** relative to the frame **106**.

A target support **162** carried by the frame **106**, has an elongated, vertical slot **164** behind which is mounted a suitable gong or other noise-making means. A paper target **168** covers the slot **164** on the opposite side of the support **162** and may be removably affixed to support **162** in any suitable manner.

Indication of the tilting of the platform **100** in one direction may take the form of a bell **170** on the support **104** within the path of travel of the platform **100**. Alternately or for use with bell **170**, there may be provided an electric switch **172** that is actuated by the platform **100** when the same is tipped in one direction. The switch **172** may be used in connection with any suitable electric circuit not shown, for igniting a lamp whereby to indicate to the player whether or not proper balance is attained.

In this same connection, it is obvious that the bell **170** and/or the switch **172**, may be operably associated with the shaft **102** or other moving parts having connection with the platform **100**.

In the operation of the device shown in the drawing, the practicer takes his position upon the platform **100** facing ball **110**. According to the theory of many professionals skilled in this field, the platform **100** should be level at the time the swing is commenced. As the club is swung from a starting position adjacent the platform **108**, the weight of the body should shift to the right foot and virtually all of the weight of the player should be on the right foot by the time the club reaches the uppermost end of its path of travel over the shoulders of the player. Thus, when the weight shifts to the right foot, that end of the platform **100** adjacent the plate **124**, will move downwardly toward the support **104**, projecting the finger **120** upwardly through the slot **122** by the action of arm **118** acting on fulcrum **132**. The finger **120** is thereby in front of the ball **110** within the path of travel of the club and, unless the player properly shifts his balance as he swings, the club will hit the finger **120** instead of the ball **110** indicating improper balance. If however, the player properly shifts his weight from the right foot to the left foot with all of his weight on the left foot at the time the club reaches the finger **120**, then the latter will have retracted and the club will hit the ball **110** instead of the finger **120**. In this connection, many professionals argue that the weight of the body should be evenly distributed on both feet at the time of the striking of the ball and in such cases it is a simple matter to merely make the necessary adjustments in arm **118** with respect to plate **124** and/or in the fulcrum **132** relative to the support **104**.

It is also argued that there is a difference as to weight distribution at the point of impact and at the position of the club just prior to hitting of the ball. In such cases of argument, the frame **106** may be shifted relative to the support **104** by loosening of the fastening means **116** thus,

moving the finger **120** closer or further away from the ball **110**. If necessary, adjustments may be made in the plate **124** relative to the platform **100** and the fulcrum member **132** may also be adjusted along a horizontal path relative to the support **104**.

In the event that the club strikes the ball **110** directly and squarely, or substantially so, the rod **146** will be driven through the target **168** and thence through the opening **164** to strike the gong **166** and thereby indicate a good drive. Rod **146** moves toward the support **162** against the action of spring **150** and the latter serves to return the ball **110** to the normal position shown in the drawings.

Spring **152** acts as a bumper for the return movement of rod **146**. The free pivotal action that is made possible by the bearing structure **142** permits an incorrect drive and the springs **156** yield to the movement of rod **146** in accordance with the manner of hitting ball **110**. If the golfer fails to force the rod **146** through the opening **164**, the target **168** will be struck and indented, whereby to indicate the extent of slice, hook, grounding or lofting of the ball.

Details of construction may vary, but such modifications as may fairly come within the spirit of the invention as defined by the scope of the appended claims, are contemplated hereby.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A device for assisting a golfer in correcting his swing, preparatory to and while making a practice stroke with a golf club, said device comprising a support; a platform; means mounting the platform on the support for swinging movement on a horizontal axis; means within the path of travel of said platform for limting the extent of swinging movement thereof, said platform being adapted to receive one foot of the golfer on each side respectively of said axis, whereby to swing the platform on said axis toward one end of its path of travel when the weight of the golfer is properly shifted from one foot to the other during said practice stroke; a second platform attached to one side of said support, there being an opening in said second platform; a flexible finger extending upwardly through said opening to a position within the path of travel of the club head; a projectile mounted on said second platform forward of the flexible finger within the path of travel of the club head so that the projectile cannot be struck until the finger has been withdrawn from said position; and structure operably interconnecting the platform and the finger for withdrawing the latter from said position when the platform is swung on said axis to said one end of its path by the shifting weight of the golfer.

2. A device as set forth in claim 1 wherein said structure includes a fulcrum bar on the support, a swingable arm carried by the bar in engagement therewith intermediate the ends of the bar, and means pivotally connecting the bar at one end thereof to said platform, the finger being secured to the bar at its opposite end.

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