March 17, 1936. J. N. WAGNER 2,034,684

GOLF PRACTICE DEVICE

Filed Sept. 12, 1933

Fig. 1

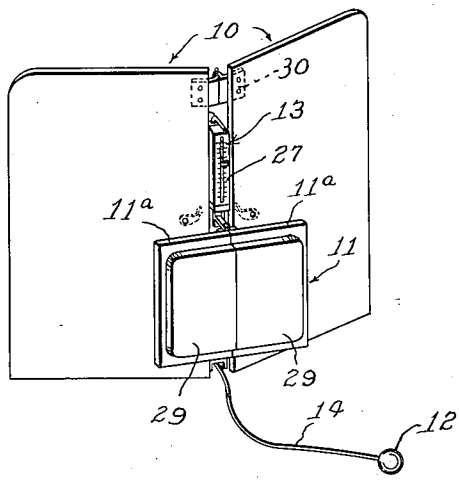


Fig. 2

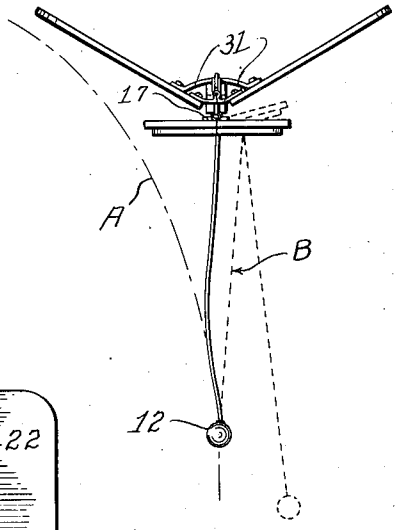


Fig. 3

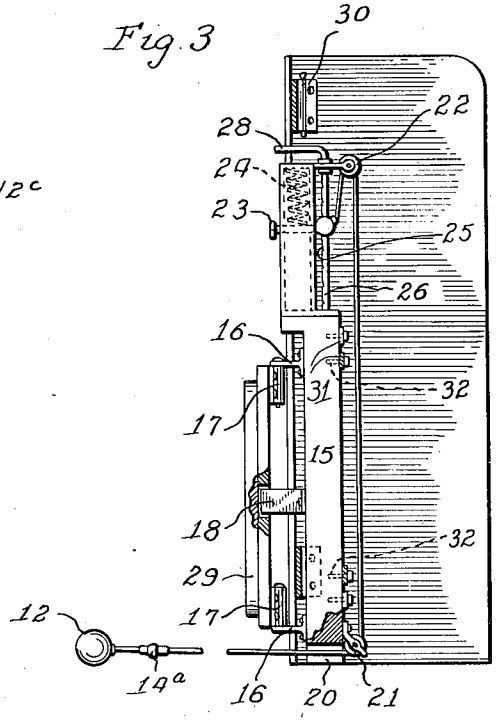
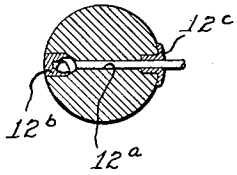


Fig. 4



Inventor

Joseph N. Wagner

Fred Bing

Atty.

Patented Mar. 17, 1936

2,034,684

UNITED STATES PATENT OFFICE

2,034,684

GOLF PRACTICE DEVICE

Joseph N. Wagner, Chicago, Ill.

Application September 12, 1933, Serial No. 689,115

4 Claims. (Cl. 265—21)

The invention relates generally to games and more particularly to a golf practice device adapted to measure the force and indicate the direction of a golf drive.

The primary object of the invention is to provide such a device which is simple and rugged in construction and accurate in operation.

Another object is to provide a device of this character which is adapted for use in a relatively small space, as for instance, in the parlor or other room of a dwelling.

Another object of the invention is to provide such a device which may be packed readily and easily in a small space so as to facilitate storage and transportation thereof.

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawing in which:

Fig. 1 is a perspective view showing the forward side of a golf practice device embodying the features of the invention.

Fig. 2 is a plan view of the device.

Fig. 3 is a central vertical sectional view of the device.

Fig. 4 is a central sectional view of the ball.

While my invention is susceptible of embodiment in many different forms, I have shown in the drawing and will herein describe in detail one such embodiment, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiment illustrated. The scope of the invention will be pointed out in the appended claims.

In the embodiment chosen for disclosure herein the invention is particularly adapted for use within a room and it comprises a two part standard 10 supporting on its forward face a vertically positioned target 11. The target 11 is relatively small and is so constructed that it is adapted to be hit by a golf ball 12 so as to register on an indicator 13 the relative power of the drive, as well as to indicate whether the drive has been "sliced" or "hooked".

In accordance with the present invention, the relative force or distance of the drive is measured indirectly by measuring the force of the rebound of the ball 12 from the target 11, and to this end the ball is connected to the indicator 13 by a flexible cord 14 of suitable material such as leather.

If desired, a swivel joint 14^a may be incorporated in the cord adjacent to the ball 12 (Fig. 3) so as to avoid twisting of the cord. As shown in Fig. 4, the cord 14 is threaded through a bore 12^a in the ball 12, and its end is knotted in the enlarged end of the bore to retain the cord in position. A filler 12^b and a bearing collar 12^c may be used to protect the knot and the projecting end of the cord from wear.

In the use of the device, the ball 12 is placed in front of the target 11 at a distance of approximately four feet, and in order to prevent interference with the swing of the club (not shown) along a path A (Fig. 2) the two parts of the standard 10 are arranged at an angle so as to project outwardly and rearwardly from the center line of the target. This construction also lends stability to the standard without the use of an additional base member.

To support the target 11 and the indicator 13 on the standard 10, a frame member 15 is mounted in the vertical space between the adjacent edges of the two parts of the standard, the member being located in a vertical position slightly rearwardly of the center of the standard. From the forward face of the frame member 15 two vertically spaced brackets 16 project to support hinges 17 whereby the target 11 is movably supported. The target 11 is constructed in two similar parts or back boards 11^a which project in opposite directions from the central axis defined by the hinges 17, and one leaf of each hinge is connected to each back board 11^a.

The hinges 17 are connected to the brackets by their pivot pins. The hinges are of the spring closed type which tend at all times to bring the back boards 11^a to a common plane, and to position the back board in the desired angular location, a spring 18 projects forwardly from the frame member 15 and into a slot formed between the adjacent edges of the back board elements 11^a, the spring 18 being positioned between the adjacent edges of the target 11 acts to locate the target in a rest position wherein the target always lies in a plane perpendicular to the spring 18. With the foregoing construction it will be evident that the impact of a ball travelling as indicated by the dotted line B in Fig. 2 will cause rearward swinging of the right hand section of the target 11 so as to indicate that the ball was sliced in the drive. As a further indication of the direction of the drive, the swinging of the target section will cause a marked increase in the angularity of the path of rebound of the ball.

To register the force of such rebound on the indicator 13, the cord 14 passes beneath the tar-

get 11 and through a slot 20 in the lower end of the frame member 15 to a pulley 21. From the pulley 21 the cord 14 passes upwardly to a pulley 22 fixed to the housing of the indicator 13, from which it extends downwardly and is attached to a vertically movable element or pointer 23 of the indicator. In its upward movement the pointer 23 compresses a spring 24 mounted within the indicator, while a ratchet (not specifically shown) rides upwardly over teeth or notches 25 in a vertically mounted rod 26.

Thus the pointer 23 of the indicator is retained by the notches 25 in the position to which it is raised by the pull of the rebounding ball 12, such position being shown by the position of the forward end of the pointer 23 on a scale 27 on the indicator 13. After the indicator has been read, the pointer is released by rotating the rod 26, a handle 28 being provided at its upper end for this purpose.

In the present embodiment of the invention, the force of the rebound of the ball 12 is increased by covering the forward face of the target 11 with two resilient pads 29 made of material such as rubber.

Preferably the device is constructed so as to be capable of being packed in a relatively small space. To this end the target 11 may be detached by removal of the hinge pins, while the two parts of the standard 10 may be folded together by reason of hinged connections 30 therebetween. To permit the desired movement of the parts of the standard 10, the frame member 15 is mounted on the standard by means of two pairs of arcuate support members 31, formed of relatively rigid material such as steel and fixed to the parts 10 so as to be slidable transversely around the rear side of the frame member 15. Screws 32 serve to clamp the frame member 15 to the arcuate support members 31 in any desired relation. It will be understood that when the parts 10 of the standard are to be adjusted or folded together, about their hinged connection, two or more of the clamping screws 32 are released or removed so as to permit free relative pivoting of the two parts 10.

It will be evident from the foregoing description that the device herein illustrated is of sturdy construction, is compact in use, and easily transported in unusually compact form. The mechanism is of simple construction, so as to withstand hard usage, yet the indications of strength and direction of the drive are accurate due to the simplicity of the principles involved.

Since the ball may be positioned relatively close to the target 11, this target may be relatively small, thus decreasing the cost as well as the size and weight of the device. Moreover, the small target may be positioned relatively close to the floor thereby increasing the stability of the device as a whole.

In addition, it will be seen that since the measurement of the distance of the drive is accomplished by the momentum of the ball at the end of its rebound, a correction is automatically introduced for angularity of the drive.

I claim as my invention:

1. A device of the character described comprising a standard, a target mounted on said standard for swinging movement about a substantially vertical axis located adjacent to the center of the target, a ball adapted to be driven against the target, a force measuring device, and a flexible cord attached at its opposite ends to the ball and to said force measuring device to operate said force measuring device in accordance with the force of the rebound of said ball from said target.

2. A golf practice device comprising a support, a target mounted on said support for swinging movement about a substantially vertical axis located substantially at the center of the target, a ball adapted to be driven against the target, a force measuring device, and a flexible cord connected at its opposite ends to said ball and to said force measuring device and passing from said force measuring device to the ball over a guide pulley located substantially on the central axis of the target so as to measure the force of rebound of the ball from the target.

3. A golf practice device comprising a standard, a target having two parts with adjacent vertical edges and mounted on said standard for independent rearward swinging movement of the two parts about axes located adjacent to the said vertical edges of the two parts, spring means to restore the two parts to a common plane, and a captive ball adapted to be driven against said target.

4. A device of the character described comprising a pair of flat elements having adjacent edges hinged together and adapted to be positioned in angular relation on the floor with the axis of their hinged connection substantially vertical, a frame member detachably connected to said elements substantially at said axis, a force measuring device mounted on said member, a ball having a flexible cord connection with said force measuring device, and a target located forwardly of the hinged axis of said flat elements and detachably associated with said frame member.

JOSEPH N. WAGNER.