United States Patent

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[15] **3,685,833**

[45] **Aug. 22, 1972**

[54] **GOLF PUTTING PRACTICE DEVICE**

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[22] Filed: **Feb. 24, 1970**

[21] Appl. No.: **13,626**

[30] **Foreign Application Priority Data**

Feb. 22, 1969 Great Britain.....9,643/69

[52] **U.S. Cl.**.....**273/176 FA**, 273/186 R

[51] **Int. Cl.**.....**A63b 69/36**

[58] **Field of Search**.....273/186, 176, 191, 192

[56] **References Cited**

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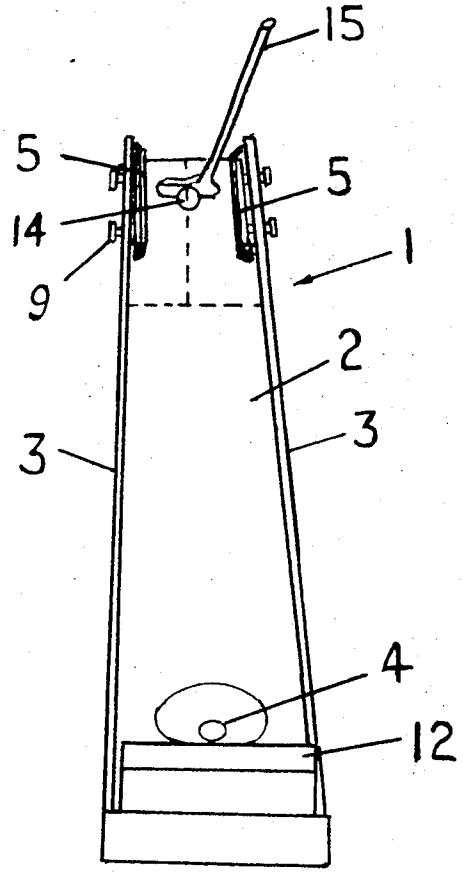
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[57] **ABSTRACT**

The invention relates to a device for practising putting in the game of golf. It includes a channel having a ball-receiving station at one end and two spaced contact devices near the other end between which a golf club is swingable. The contact devices are connected electrically to a warning device so that if either is touched by a club swung between the contact devices the warning device is operated. Each contact device includes a rigid electrical conducting strip and a flexible strip of electrically conducting material held close to, but not touching, the rigid strip. Adjustment screws permit the distance between the contact devices to be varied.

5 Claims, 3 Drawing Figures



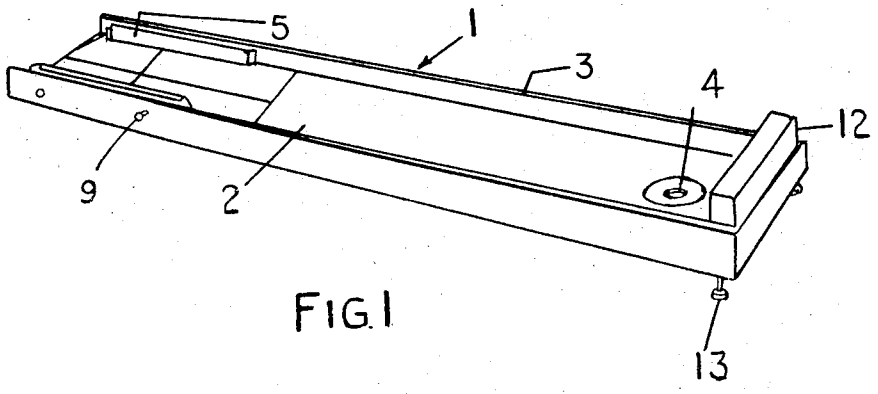


FIG. 1

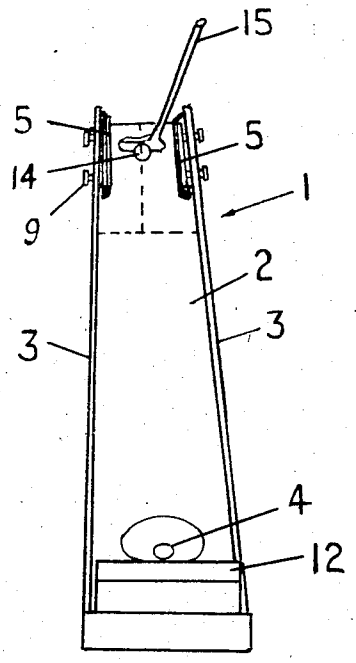


FIG. 2

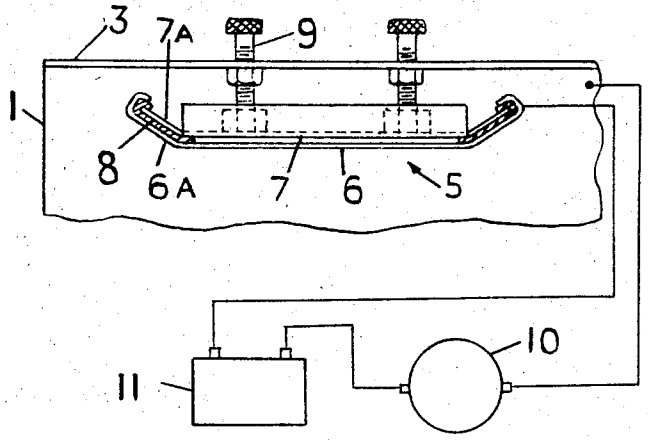


FIG. 3

GOLF PUTTING PRACTICE DEVICE

This invention relates to a device for practising putting in the game of golf and is particularly intended to develop control of the club during the operation of putting.

A device according to the invention incorporates a channel presenting near one end a ball-receiving station simulating the cup of a normal green of a golf course, two contact devices disposed on opposite sides of the channel near the other end, each contact device extending along the channel a distance sufficient to cover the normal length of the swing of a club during the action of putting, an electrically operated warning device having circuits in which the contact devices are separately connected, each contact device being operable when touched to complete an associated circuit and set the warning device in operation.

Each contact device may consist of a flexible strip of electrically conducting material held close to but not touching a rigid strip of electrically conducting material so that if the flexible strip of one of the contact devices is caused to touch the associated rigid strip at any point the circuit is completed to the warning device, the rigid strip of each contact device being held adjacent a respective side of the channel.

In one construction the flexible strip of each contact device is clipped over the ends of the associated rigid strip with insulating material interposed between the flexible strip and the rigid strip. The contact devices may be attached to the flanges of the channel with the contact devices opposite one another and spaced from one another a sufficient distance to allow passage of the head of a golf club. The contact devices may be attached to the flanges by means which permit adjustment of the distance between the contact devices so that as the skill of the player increases, i.e. his control over the movement of the club increases, the contact devices may be moved more closely together.

The device may incorporate a buffer adjacent to the ball-receiving station, the buffer taking the form of a strip of material so bent as to deflect a ball which has gone beyond the ball-receiving station back to one side or other of the ball-receiving station so that it does not enter the ball receiving station when being returned by the buffer.

The channel may incorporate two portions movable in a transverse direction relatively to one another, one portion containing the ball-receiving station and the other supporting the contact devices.

The web of the channel i.e. the portion along which the ball is to be played may be formed with means for locating a ball in the playing position. Such means may consist of a depression at the playing position. The depression may be a conical or part-spherical depression or may be a depression which has an upward slope in the direction towards the ball-receiving station. Alternatively and if the practice device is to be used with a ball having a ferrous center the channel may support a magnet below the playing position.

The device may be fitted with means for elevating the end of the device at which the ball-receiving station is located, so that the device may be inclined to provide the effect of a putt which is considerably longer than the length of the device. The device may be fitted with a clinometer calibrated in terms of distance so that the device may be set to give the effect of a putt of any desired length.

The device may be fitted with means for elevating one side of the device to give the impression of a green which is inclined transversely with respect to the player.

There may be provided for use in conjunction with the device, balls, which, while having the same diameter and weight as normal golf balls, have surfaces formed to give the impression of different degrees of roughness on the surface of a green.

The channel may be formed with a compartment for holding an electric battery and the warning device so that the device is self contained.

A practical embodiment of the invention is illustrated in the accompanying drawings in which

FIG. 1 is a general perspective view of the device,

FIG. 2 is a perspective view looking from one end of the device showing how the device is put into use and

FIG. 3 gives details of one of the contact devices and the electrical connections thereto.

In the drawings, 1 denotes a channel having a bottom 2 and two flanges 3, the bottom 2 being formed near one end with a ball-receiving station in the form of a depression 4. Near the other end of the channel 1 there are provided two contact devices 5 attached to opposite sides of the channel as constituted by the flanges 3. Each contact device 5 is of a length sufficient to cover the normal length of the swing of a club during the action of putting. Each contact device consists of a flexible strip 7 of electrically conducting material held parallel and close to but not touching a rigid strip 7 of electrical conducting material. The two strips 6 and 7 are clamped together at the ends only, strips of insulating material 8 being interposed between them so that there is a gap between the strips in the middle portions of the strips. The end portions at which the insulating strips are located are bent backwardly at 6A, 7A away from the middle portion where the gap is presented so that these end portions do not interfere with the swing of the club. The rigid strips 7 are attached by adjusting screws 9 passing through the flanges 3 in the channel 1. Where the channel is of metal the strips are in electrical contact with the channel and the channel is connected to one terminal of a warning device constituted by a buzzer 10 the other terminal of which is connected to one pole of a battery 11 the other pole of which is connected to the strip 6. Where the channel is of non-metallic material the strip 7 is directly connected to the buzzer 10. 12 denotes a box carrying the battery and buzzer and 13 denotes height-adjusting screws which may be operated together to provide the desired degree of longitudinal tilt of the device or may be adjusted separately to provide a desired degree of transverse tilt. In FIG. 2 a ball 14 and a club 15 are shown in playing position.

In practice, a ball 14 is placed at the playing position and the club 15 is swung between the contact devices 5. Any deviation of the club from the direction in a straight line between the ball and the ball-receiving station 4 greater than a predetermined amount as set by the distance between the contact devices 5 will cause the club to come against the flexible strip 6 of one or other of the contact devices thereby causing it to flex and come against the adjacent rigid strip 7 thus

completing the circuit to the buzzer **10** and giving an indication that the club has not been properly swung.

What is claimed is:

1. A device for practicing putting in the game of golf incorporating a channel positioning near one end a ball-receiving station simulating the cup of a normal green of a golf course, two contact devices disposed on opposite sides of the channel near the other end, each contact device comprising a rigid strip of electrically conducting material held adjacent a respective side of the channel and a flexible strip of electrically conducting material held close to but not touching the rigid strip, and each contact device extending along the channel a distance sufficient to cover the normal length of the swing of a club during the action of putting, and an electrically operated warning device having circuits in which the contact devices are separately connected, each contact device being operable when the flexible strip is distorted by pressure of the head of an incorrectly swung club and thereupon touches the rigid strip, to complete the associated circuit and set the warning device in operation.

2. A device as claimed in claim **1** in which the flexible strip of each contact device is clipped over the ends of the associated rigid strip and insulating material is interposed between the flexible strip and the rigid strip.

3. A device as claimed in claim **1** incorporating means by which the contact devices are attached to the sides of the channel, said means being arranged to permit adjustment of the distance between the contact devices.

4. A device as claimed in claim **1** incorporating elevating means for elevating the end of the device at which the ball-receiving station is located.

5. A device as claimed in claim **1** incorporating elevating means for elevating one side of the device.

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