Oct. 22, 1963 J. R. STRUNK 3,107,920

GOLF PRACTICE DEVICE

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Fig. 1.

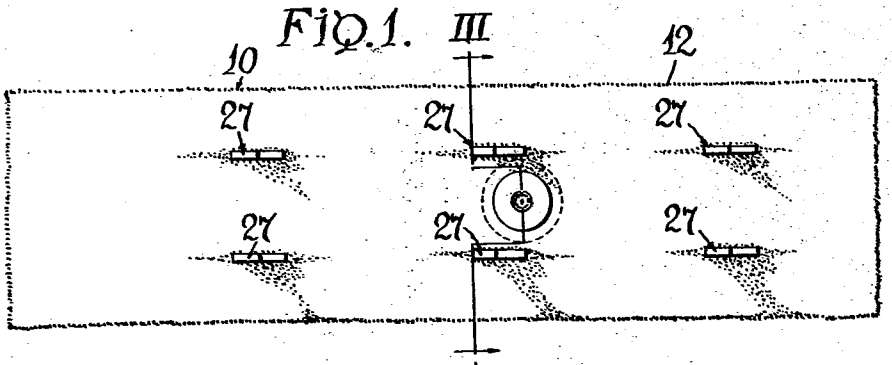


Fig. 2.

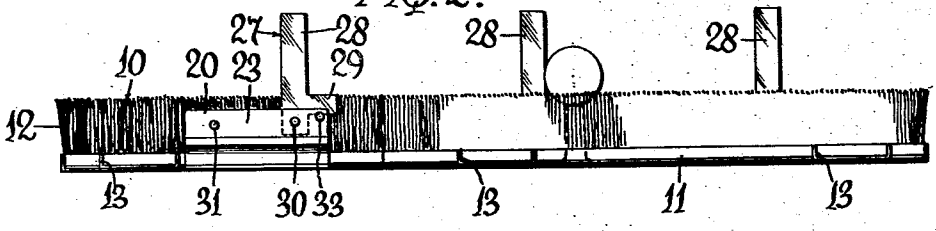


Fig. 4.

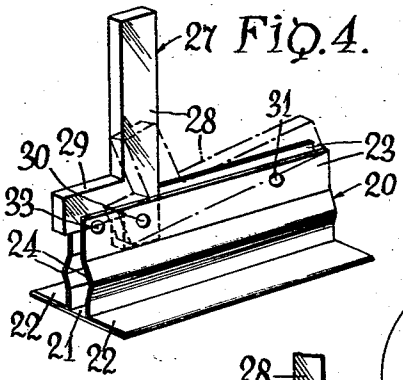


Fig. 3.

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Fig. 5.

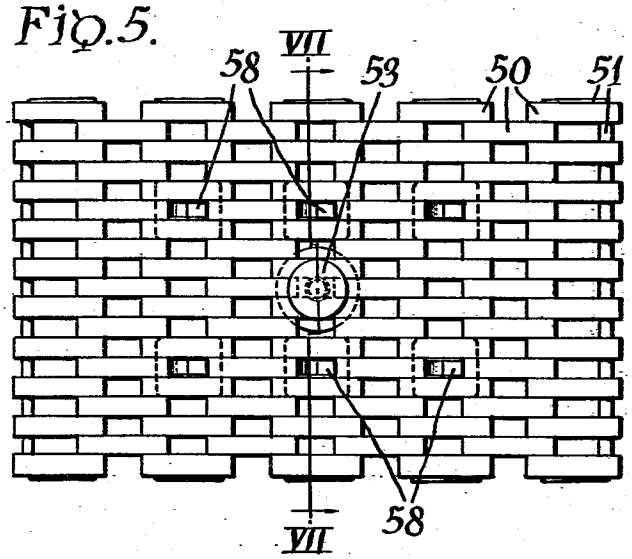


Fig. 6.

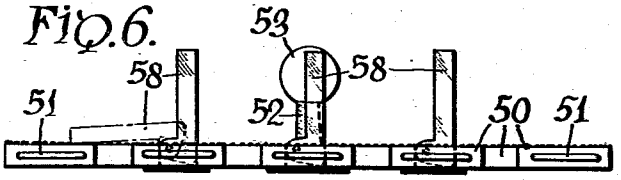


Fig. 8.

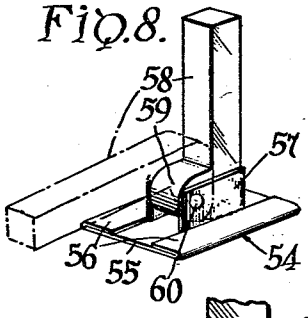


Fig. 7.

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GOLF PRACTICE DEVICE

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3 Claims. (Cl. 273—186)

This invention relates to golf practice devices and particularly to an indicator arrangement for signalling deviations from a proper or desired golf club swing in the execution of a stroke.

In my prior Patent No. 2,801,857 dated August 6, 1957 I have disclosed a golf stroke indicator apparatus wherein a special platform from which a ball is driven is arranged with upstanding members which define a desired club head path and which are moved by the club head if it leaves the desired path to give a visual indication of such deviation. In the arrangement of my prior patent a special indicator-supporting platform is provided and the arrangement of the indicators permits only a limited degree of transverse adjustment or rearrangement and no longitudinal adjustment or rearrangement.

My present invention provides indicator means which may be readily employed without special platform means and in conjunction with ball supporting surfaces or mats such as are commonly employed at golf driving ranges, golf schools, practices tees at golf clubs, and at other places where golf practice takes place.

Thus a primary objective of the present invention is the ready adaptability of the devices of my present invention to golf practice surfaces or mats of types currently in use without modification of such surfaces or mats, and by mere insertion of the devices of the present invention upwardly through such surfaces to properly position and present the devices for use.

A further object and advantage of the present invention resides in the fact that the indicating devices may be employed in any desired number and may be positioned at various points about the practice surface virtually at will to define various stroke patterns and club-head paths. Thus the indicators may be positioned to cope with various stroke problems, to suit the proper stroke paths of various clubs, and to satisfy a variety of other conditions or considerations. Certain of the theoretical factors involved in correct golf stroke paths for various clubs and to correct various stroke defects are explained at some length in my aforesaid prior patent.

While specific embodiments of the indicating or signalling devices of my present invention are illustrated in the accompanying drawings and described in detail in the following specification, it is to be understood that such specific embodiments and the practice mat surfaces with which they are shown are set forth by way of example only and that the principles of the present invention are not limited thereto nor otherwise than as defined in the appended claims.

In the drawings:

FIG. 1 is a top plan view of a mat device comprising one form of golf practice surface equipped with devices according to one form of the present invention;

FIG. 2 is a side elevational view of the apparatus of FIG. 1;

FIG. 3 is a cross-sectional view taken generally as indicated by the line III—III of FIG. 1 but on a substantially enlarged scale;

FIG. 4 is a detailed perspective view of one of the indicating devices of the present invention of the embodiment illustrated in FIGS. 1, 2 and 3;

FIG. 5 is a top plan view of another mat device commonly employed as a golf practice surface equipped with devices of the present invention in a modified form;

FIG. 6 is a side elevational view of the apparatus of FIG. 5;

FIG. 7 is a cross-sectional view taken generally on the line VII—VII of FIG. 5 but on an enlarged scale; and

FIG. 8 is a detailed perspective view of the embodiment of the present invention illustrated in FIGS. 5, 6 and 7.

Like characters of reference denote like parts throughout the several figures of the drawing. FIGS. 1, 2 and 3 illustrate a form of golf practice surface known as a brush mat which is fairly well known and widely used. A series of elongated relatively flat brush members designated generally by the numeral **10** are mounted adjacent to each other with their bristles projecting upwardly to form a yieldable pile or tufted surface somewhat resembling turf in its physical characteristics.

In the drawings, each of the brush members comprises a holder or channel **11** with a row of bristles **12** extending upwardly therefrom. A plurality of brush members **10** are attached to a series of transversely extending channel members **13** to form a unitary or continuous upper bristle surface as illustrated in FIG. 3. In this form of golf practice surface the channels **11** of the brush members **10** are spaced as shown in FIG. 3 so that the upper ends of the bristles have a substantial degree of yieldability or flexibility in both longitudinal and laterally horizontal directions.

As indicated above, the foregoing golf practice device is known in the art as a brush mat and is commercially available and need therefore not be described further herein. It is the usual practice to use this type of surface device for practicing golf strokes with the ball resting directly on the bristle surface as in executing iron shots and other golf strokes wherein the ball is not teed up.

The present invention provides devices which in one embodiment may readily be associated with a surface device of the foregoing description to define a given club head path and, more importantly, to give a clear visual indication or signal when a practice stroke deviates from the desired predetermined club head path.

With indicating or signalling devices constructed according to the present invention the same may be variously located with respect to the practice surface and any desired number of signalling devices may be employed to define various club head paths. Furthermore, since the devices are readily assembled with the golf practice surface device and readily disassembled therefrom, a user may apply the indicating and signalling elements to golf practice surface devices which may be found at driving ranges, golf clubs, golf schools and similar establishments and remove them when he leaves.

Still further, the manner in which the devices of the present invention are inserted into or assembled with the conventional golf practice surface devices permits a user to locate the signalling or indicating devices in any desired number and any desired pattern to suit his own purposes.

Referring to FIG. 4, the signalling or indicating devices of the embodiment now being described and which is shown associated with a golf practice surface in FIGS. 1, 2, and 3, comprises a support member designated generally by the numeral **20**, such support member being generally in the form of a channel. More particularly, support member **20** comprises a medial base portion **21**, return bent flanges **22** and upstanding terminal flanges **23**. In the present instance the upstanding flanges **23** have outwardly formed bead portions **24** which serve as resilient detent means in conjunction with the holders **11** of the brush members **10**.

The indicating members per se are designated generally by the reference numeral **27** and comprise an elongate

bar portion 28 having a relatively shorter bar portion 29 extending therefrom generally at right angles. The main bar portion is pivoted between the upstanding flanges 23 as at 30 whereby the opposite end of the main bar portion 28 may extend upright as in FIGS. 2, 3 and 4, or may be in a reclined position, as indicated in dot and dash lines in FIG. 4.

In the present instance the reclining position is limited by a rivet 31 which extends between the upstanding flanges 23 and the vertical position of the elongated bar portion 28 of indicator 27 is fixed by means of a rivet 33 which extends between the upstanding flanges 23 and against which the short bar portion 29 engages when the indicator is in upright position as in full lines in FIG. 4.

In applying a signal or indicating device assembly of the form shown in FIG. 4 to the golf practice surface device illustrated in FIGS. 1, 2 and 3 and described above, the elongated indicator bar member 28 is disposed in its upstanding position and is projected upwardly between a pair of brushes 10 until the base flange portions 21 and 22 move upwardly against the bottoms of the channel holders 11 of the brush members.

In this position the bead formations 24 of the channel member 20 of the indicator resiliently bear against the upper portions of the channels 11 of the brush members 10 whereby the indicator devices are held in position for use.

When the upstanding flanges 23 of a channel member 20 are in the position illustrated in FIGS. 2 and 3 they tend to spread the bristles of the adjacent brush members 20 to define what looks like a slot in the bristle surface, such slot being generally of a width defined by the spacing of the upstanding flange members 23 and of a length substantially the same as the length of such flange members. This slot-like depression permits the upstanding portion of the elongated bar 28 of an indicator to pivot downwardly into the dot and dash line position of FIG. 4 without interference from the bristles.

A tee device is not usually used with the golf practice surface of the type shown in this embodiment but I prefer to employ a tee device which in the present instance serves more as a marker than as a ball supporting tee. This tee device may comprise an upstanding flexible tubular portion 40 and a base portion 41, the device usually being of flexible rubber or the like. This type of tee is very well known.

When such a tee is projected upwardly between a pair of adjacent brush members 10 in this type of golf practice surface is assumes approximately the position illustrated in FIG. 3 and tends to form a clearly visual small opening in the bristle surface so that golf balls may readily be placed in the same position repeatedly even though they may actually be supported by the surrounding bristles rather than by the tee itself.

The elongated bar portions 28 of the indicators 27 are initially positioned to extend upwardly as illustrated in FIG. 2 and golf strokes are practiced from right to left as viewed in FIGS. 1 and 2. Accordingly, when a stroke is executed wherein the club head leaves the path defined by the six indicators in FIG. 1 it will strike one or more of the upstanding bar members 28 and pivot the same to the lowered position shown in dot and dash lines in FIG. 4, thus clearly indicating the fact of the stroke deviation and also the portion of the stroke in which the deviation occurred and the direction of such deviation.

The shorter arm 29 which extends generally upwardly when an indicating bar 28 is lowered may readily be employed as a sort of trigger to reset the indicating device by pivoting the same in a counterclockwise direction as viewed in FIG. 4. This may be done by a user with his foot or with the head of a golf club without stooping over.

The embodiment of the signalling or indicating device of my invention which is illustrated in FIGS. 5 through 8 is generally similar to the previous embodiment, differing therefrom mainly in proportions, and such differences are

generally to adapt the same for use in conjunction with another widely used type of golf practice surface which is especially commonly used at golf driving ranges. Such other type of golf practice surface is primarily known and used as a door mat and comprises a number of blocks of rubber or rubber coated or other composition material designated 50 in FIGS. 5 through 8, the same being pivotally connected in the staggered relationship illustrated in FIG. 5 by pivot rods 51. Thus the assembly of blocks 50 is flexible in a longitudinal direction, from left to right as viewed in FIGS. 5 and 6, but is relatively rigid in a transverse direction.

This type of door mat construction is well known and its use as a golf practice surface is extremely familiar, the same being known as a tee mat. A flexible tubular tee device 52 for supporting a golf ball 53 may be employed by projecting the upper tubular end of the tee device upwardly through a space between adjacent blocks 50 as clearly shown in FIG. 7. This type of tee is commonly supplied with tee mats of the type shown in FIGS. 5 through 7 at golf driving ranges.

The signalling devices of the present invention are, as in the previous embodiment, associated with the surface made up by the pivot blocks 50 by insertion upwardly through any desired spaces between adjacent blocks 50. Referring to FIG. 8, the signalling device of this embodiment comprises a holder designated generally by the numeral 54 and including a medial base portion 55, retu[illegible] bent flanges 56 and spaced upstanding flanges 57.

An indicating bar 58 has a lateral extension 59 a[illegible] its lower end which is pivoted between flanges 57 as at 60 and the indicating bar 58, which is in a vertical position when initially assembled with the surface structure and prior to a golf stroke, moves downwardly to the dot and dash line position of FIG. 8 when struck by a golf club due to a deviation in the path of the club head. In this instance the indicating bar 58 may rest on top of the surface defined by the blocks 50 since this surface is commonly employed with the ball in a teed position whereby there is ample clearance for a deflected indicator bar as appears in FIG. 6.

I claim:

1. In combination with a golf practice mat comprising a support and a plurality of brush members each comprising an elongate holder portion with bristles projecting therefrom with said holders attached to said support in spaced relation and with their bristles projecting upwardly to form a substantially continuous yieldable bristle surface, said spaced holders forming longitudinal passages therebetween, an indicator device comprising a base plate and spaced flange members extening upwardly therefrom, an elongated indicator member pivoted at one end thereof between said flange members and adapted to assume relatively vertical and relatively horizontal positions, said device being associable with said mat means by projecting the indicator member upwardly between adjacent spaced brush holders with said indicator member disposed in its relatively vertical position whereby the same extends upwardly above the aforesaid bristle surface and with said flange members disposed in said longitudinal passages between the brush holders and the base plate lying generally against the underside of said holders to be retained between the same and the surface on which the mat is used.

2. In combination with a golf practice mat comprising a support and a plurality of brush members each comprising an elongate holder portion with bristles projecting therefrom with said holders attached to said support in spaced relation and with their bristles projecting upwardly to form a substantially continuous yieldable bristle surface, an indicator device comprising a base plate and spaced flange members extending upwardly therefrom, an elongated indicator member pivoted at one end thereof between said flange members and adapted to assume relatively vertical and relatively horizontal positions, said

device being associable with said mat means by projecting the indicator member upwardly between adjacent spaced brush holders with said indicator member disposed in its relatively vertical position whereby the same extends upwardly above the aforesaid bristle surface and with said flange members disposed generally between the brush holders and the base plate lying generally against the underside of said holders to be retained between the same and the surface on which the mat is used, said flange members extending upwardly beyond said holders to spread said bristles and thus form an opening in the bristle surface to receive said indicator member when the same moves to horizontal position.

3. In combination with a golf practice mat comprising a support and a plurality of brush members each comprising an elongate holder portion with bristles projecting therefrom with said holders attached to said support in spaced relation and with their bristles projecting upwardly to form a substantially continuous yieldable bristle surface, said spaced holders forming longitudinal passages therebetween, an indicator device comprising a base plate and spaced flange members extending upwardly therefrom, an elongated indicator member pivoted at one end thereof between said flange members and adapted to assume relatively vertical and relatively horizontal

positions, said device being associable with said mat means by projecting the indicator member upwardly between adjacent spaced brush holders with said indicator member disposed in its relatively vertical position whereby the same extends upwardly above the aforesaid bristle surface and with said flange members disposed in said longitudinal passages between the brush holders and the base plate lying generally against the underside of said holders to be retained between the same and the surface on which the mat is used, said flange members and said holders cooperating to form a resilient retaining detent for said indicator device.

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