GOLFING PRACTICE DEVICE

In one embodiment of the present invention a device for piercing and raising carpet to create sloped practice putting surfaces is described. Each device comprises a handle for manually rotating the device and a helical wire form designed to pierce a carpet and lift the carpet upwardly to create a slope that a user practices putting upon.
GOLFING PRACTICE DEVICE

FIELD OF THE INVENTION

[0001] This invention generally relates to golfing and putting practice devices.

BACKGROUND

[0002] The game of golf is a pastime that many persons spend a great deal of time practicing to obtain and maintain proficiency. One aspect of the game is putting. Although putting practice facilities are available at golf courses, because the putting swing has a low-range of motion and weather conditions are not always permitting, many persons practice putting in the confines of their home, office, or hotel room.

[0003] Many golf course greens slope, or “break.” One problem with in-home putting practice is the lack of putting practice surfaces that slope. In order to provide as accurate a simulation of putting greens as possible for in-home putting practice, numerous putting practice devices, such as described in U.S. Pat. No. 3,892,412 (the ‘412 patent) and U.S. Pat. No. 6,413,166, simulate the sloping and rolling nature of golf greens. Although accurately depicting the surfaces of putting greens, many of these practice devices have deficiencies stemming from two inherent attributes: (i) a putting surface and (ii) a system which creates the slopes and angles in the putting surface.

[0004] These attributes create problems in prior art, such as taught in U.S. Pat. Nos. 5,655,971 and 6,746,338, producing devices which are cumbersome to move and store. Providing golfers with a simulated putting surface requires space to store the device, ability to move the device between storage and use, and time to set up the practice putting device. For persons traveling, with limited storage space, or with limited time, owning and setting up a putting practice device which provides the angles and slopes of a putting surface may not be feasible.

[0005] Current putting practice devices are also difficult to maintain and service. Many current devices, such as the ‘412 patent and U.S. Pat. No. 5,855,522, contain moving mechanical parts such as air bladders and springs to create the angles in the putting surface. These mechanical parts are located under the putting surface. When these devices become inoperable, they are difficult to repair and replace due to their location.

[0006] Current putting devices are also expensive to purchase. Because the devices contain multiple parts, their cost of manufacture is high, and this cost is passed along to the consumer.

SUMMARY OF THE DRAWINGS

[0007] FIG. 1 is an isometric front view of a device for raising carpet to create sloped putting surfaces according to one embodiment of the present invention.

[0008] FIG. 2a is a side view of a device for raising carpet to create sloped putting surfaces illustrating the manner in which the carpet is pierced by the device according to one embodiment of the present invention.

[0009] FIG. 2b is a side view of a device for raising carpet to create sloped putting surfaces illustrating the manner in which the carpet is raised to create the desired sloping angle, according to one embodiment of the present invention.

[0010] FIG. 3 shows an isometric front view of a device for raising carpet to create sloped putting surfaces with an integrally formed handle and wire form, according to one embodiment of the present invention.

[0011] FIG. 4 is a side view of a device for raising carpet to create sloped putting surfaces where an acute angle is created by the wire form, according to one embodiment of the present invention.

DETAILED DESCRIPTION

[0012] One embodiment of the current invention comprises a handle attached to a wire form adapted to pierce and raise carpet to create a sloped surface for putting practice. Sloped surfaces can be created on surfaces such as, but not limited to, tacked carpets, untacked carpets, and large area rugs. The wire form is comprised of a single wire extending from the handle and ending in a sharp tip. In variations, the handle and the wire form are integrally formed. In other variations, the wire form can be a dual strand wire form to increase stability and strength. Typically, the wire form extends away from the handle in a helix, spiraling in either a clockwise or counter-clockwise direction, then becoming generally straight along a path generally parallel to the helix's longitudinal axis, and finally ending in a short spiral. The direction of the short spiral is opposite the direction of the helix. For example, if the helix extends away from the handle in a clockwise direction, the spiral would be a counter-clockwise spiral. In variations, the wire form creates an acute angle, such as a hook, to the generally straight section instead of comprising of a short spiraled section. The acute angle and/or spiraled section are necessary when raising the carpet in order to prevent the sharp tip from piercing material or scratching a floor underlying the carpet, such as, but not limited to, an underlying hardwood floor. Additionally, the acute angle and spiraled section provide vertical stability to the device, creating a larger frictional surface area with the underlying floor or material than a single sharp tip would provide. Other variations of the device include a sheath covering the wire form. The sheath acts as a protective device during non-use, protecting the wire form from damage and providing protection from the wire form’s sharp tip.

[0013] One method of using the embodiment to raise a carpet and create a sloped putting surface comprises piercing the carpet and rotating the device. The carpet is pierced by placing the sharp tip on the surface of the carpet and pressing the sharp tip into the carpet by rotating the device in the direction of the sharp-tipped spiraled section of the wire form. For example, for a wire form comprising a clockwise helix and a counter-clockwise spiral, the device is rotated in a counter-clockwise manner to pierce the carpet. Once the tip has pierced the carpet, the device is rotated in the same direction until the carpet is placed at the beginning of the helix. In variations, the counter-clockwise rotation is not needed to pierce and place the carpet at the clockwise helix. In devices where the wire form creates an acute angle with the helical longitudinal axis instead of comprising of a spiraled tip, the entire device is placed at an angle to the carpet, with the sharp tip placed on the carpet. The sharp tip pierces the carpet by a user holding the handle and pressing...
downwardly while pivoting the device around the handle, hooking the carpet onto the sharp tip. In both carpet piercing variations, upon reaching the beginning of the helix, the device is rotated in the direction necessary to move the carpet up the helix and towards the handle. For example, a device containing a helix extending away from the handle in a clockwise direction would need to be rotated clockwise in order to raise the carpet. Upon reaching the desired sloping angle, the user stops rotating the device. The device is then checked for stability, taking care that the device is generally vertical and will not tip when a golf ball travels across the sloped area. Once secure, a golf ball is putted across the sloped surface. In variations, the golf ball is putted towards a ball-catching device or putted across multiple sloped surfaces. Additional sloped surfaces are created using the same method used to create a single sloped putting surface described above. In variations, additional devices are used to change the sloping angle in the original sloped putting surface.

[0014] In one embodiment, the device can resemble a golf object. The handle is an object such as a golf ball, a club head, or a pin flag, and is sized to fit the grip of an average adult. The sheath can be a corresponding object such as a golf tee, club shaft, or flag pole. In other variations, the device can resemble any object, such as, but not limited to, a football helmet, a flower, and/or an automobile.

Terminology

[0015] The term “or” as used in this specification and the appended claims is not meant to be exclusive; rather the term is inclusive meaning “either or both.”

[0016] References in the specification to “one embodiment”, “an embodiment”, “a preferred embodiment”, “an alternative embodiment” and similar phrases mean that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. The appearances of the phrase “in one embodiment” in various places in the specification are not necessarily all meant to refer to the same embodiment.

[0017] The term “couple” or “coupled” as used in this specification and the appended claims refers to either an indirect or direct connection between the identified elements, components or objects. Often the manner of the coupling will be related specifically to the manner in which the two coupled elements interact.

[0018] Directional and/or relational terms such as, but not limited to, left, right, rear, front, top, bottom, vertical, horizontal, back, front and lateral are relative to each other and are dependent on the specific orientation of a applicable element or article, and are used accordingly to aid in the description of the various embodiments and are not necessarily intended to be construed as limiting.

[0019] The term “wire form” as used in this specification and the appending claims is meant to convey a wire-like device, but is not meant to only refer to a metallic device formed from wire stock.

[0020] The term “composite” as used in this specification and appending claims refers to a complex material in which two or more distinct and structurally complementary substances such as, but not limited to, metals, ceramics, glasses, and polymers, are combined.
of the carpet 115. The rotational direction needed to pierce the carpet is opposite the direction the helix 22 spirals out of the handle 14. For example, the piercing rotational direction would be a counter-clockwise direction for a helix 22 extending away from the handle 14 in a clockwise fashion because the second section 26 would have a counter-clockwise spiral portion 28. In variations, where the second portion 26 resembles a hook or an upward acute angle, the counter-clockwise rotation is not needed to pierce the carpet and place the carpet at the beginning of the clockwise helix 22. In these devices, the entire device is placed at an angle to the top of the carpet 100, with the sharp tip placed on the top of the carpet 100. The sharp tip then pierces the top of the carpet 100 by holding the handle and pressing downwardly while pivoting the device around the handle to pierce the bottom of the carpet 115 with the sharp tip. Using either method, once the sharp tip 32 pierces the bottom 115 of the carpet and comes into contact with the underlying floor 105 or material, the user gradually places the device 10 in a generally vertical position while continuing to rotate the device 10 in the same piercing rotational direction.

Once the carpet reaches the beginning or distal end 34 of the helical spiral portion 22, the user rotates the device 10 in the direction opposite the direction the user was rotating the device up to that point if the user is using a device 10 with a short spiraled section. Accordingly, the carpet travels along the helix 22 towards the handle 14. Because the device 10 is in a vertical position, by traveling towards the handle 14, the carpet is raised off the floor 105 and creates a sloping putting surface 110.

Upon reaching the desired carpet height to create the sloping putting surface 110, the device 10 is checked for stability. Once stable, the user retrieves a golf ball and golfing putter and puts a golf ball across the sloping putting surface 110. In variations, instead of putting a golf ball across the sloping putting surface 110, the user will instead repeat the method to create additional sloped putting surfaces potentially forming a complex multi-sloped putting surface more accurately representative of actual putting greens. Upon placing one or more carpet break devices 10 into the carpet, the user practices putting a golf ball across the sloping putting surfaces 110. In variations, a user puts a golf ball towards a golf catching device, such as, but not limited to, a machine designed to catch and return golf balls, or a drinking receptacle such as, but not limited to, a Dixie™ cup.

Second Embodiment of a Device for Lifting Carpet to Create Sloped Putting Surfaces

Generally, referring to FIG. 3, an embodiment of a device 36 for raising carpet to create a sloped putting surface is similar to the device 10 described above. Several differences can, but do not necessarily include (i) a handle 38 that is not a golfing object and (ii) an integrally-formed handle 38 and wire form 24. In all other respects, the integrally formed device 36 for lifting carpet is typically the same as the first device 10 for lifting carpet: (a) a handle 38 and (b) a wire form 24 comprising: (i) one helical portion 22 and (ii) a second portion 26, a section of which is comprised of a spiral 28. In variations, depending on the size of the handle 38, adjustments to the thickness of the wire form 24, the circumference of the helix 22, and the spacing between the helical loops 16 can be made. These variations can create a shorter device 36, possibly being easier to carry in a small hand-bag or jacket pocket. Additionally, variations to the second portion 26 of the wire form 24 are possible, for example, the second section can comprise of a hook or angled second portion instead of a spiraled portion 28.

The greatest structural difference between the first embodiment and the second embodiment is the integrated handle 38 and wire form 24. The integrated handle 38 allows the device 36 to be manufactured from a single material, eliminating separate components on the device. This variation of the device can lead to potentially lower manufacturing costs, thereby leading to lower costs to the consumer than the two piece device 10, as shown in FIG. 1. Additionally, the integrated handle 38 and wire form 24 can be structurally stronger than the two piece device 10, depending on the material used to create the integrated device 36.

Third Embodiment of a Device for Lifting Carpet to Create Sloped Putting Surfaces

Generally, referring to FIG. 4, the third embodiment of a device 42 for raising carpet to create a sloped putting surface is similar to the device 10 described above in FIG. 1. One difference between the third embodiment 42 from the first embodiment 10 described above is that on the third embodiment 42, the second portion 26 of the wire form 24 is not spiraled, but instead the second portion 26 generally creates an upward-angled acute angle, or a hook, relative to the helix’s 22 longitudinal axis. Typically, this acute angle is created through the second portion 26 resembling a hook. In variations, the second portion 26 hook does not contain a section 50 generally perpendicular to the second portion section 30 generally parallel to the helical longitudinal axis. In this variation, the second section 26 acute angle is created between a proximal second portion section 30 generally paralleling the helical longitudinal axis and a distal second portion section extending directly away from the section generally paralleling the helical longitudinal axis in an upward acute angle, towards the handle 14.

The hook section 46 of the second portion 26, or the acute angle variation described above may be more suitable for persons with thick carpet laid on top of a foam pad. Because of the pliable, yet sturdy nature of such a carpet, a large piercing force may need to be exerted onto the sharp tip 32. The hook-shaped devices 42 can provide this force. Additionally, hook-shaped devices 42 provide users an alternative device to avoid piercing underlying carpet pads. Because the method used to pierce a carpet with a hook-shaped device 42 is different than the method used to pierce a carpet with a spiral-tipped device 10, some users can find the hook-shaped device 42 easier to pierce carpet with. Using this device 42 with an integrated handle described in the second embodiment above can provide additional strength for highly tensile carpets.

In all other aspects, the hook shaped device 42 for lifting carpet is typically the same as the first device 10 for lifting carpet: (a) a handle 14 and (b) a wire form 24 comprising: (i) one helical portion 22 and (ii) a second portion 26 containing a straight section 30 and a sharp point 32.

Alternative Embodiments and Variations

The various preferred embodiments and variations thereof illustrated in the accompanying figures and/or described above are merely exemplary and are not meant to limit the scope of the invention. It is to be appreciated that numerous variations to the invention have been contemplated as would be obvious to one of ordinary skill in the art.
with the benefit of this disclosure. All variations of the invention that read upon the appended claims are intended and contemplated to be within the scope of the invention.

[0033] The specific configurations of the device can vary substantially. For example, the device may also be comprised of a motor to provide the user relief from employing manual power to raise a carpet. In such a variation, the motor can be battery powered or the motor may receive power through a wall outlet. In other variations and embodiments, the device may be comprised of a pulley system, piercing the carpet and being raised through the cable-pulley system. Such a variation can be a motorized or a manual system. Furthermore, the dimensions of any device described are not limited in any manner whatsoever, so that such devices can be used to create indoor “putt-putt golf” courses, should a user so desire. In additional variations, the handle of the device can also act as the sheath upon either detaching from the wire form or if the wire form folds or otherwise fits into the handle.

1 claim:

1) A device for lifting up a portion of a carpet, the device comprising:

   a handle; and
   a wire form comprising integrated first and second portions,
   the first portion being coupled to the handle at a first portion proximal end and integrated with the second portion at a first portion distal end, the first portion including a helix spiraling from the first portion proximal end to the first portion distal end in a first rotational direction;
   the second portion extending from the first portion distal end to a second portion distal end and being at least partially spiraled in a second rotational direction, the second portion distal end terminating in a sharp point and the second rotational direction being opposite the first rotational direction.

2) The device of claim 1, wherein (i) the first portion helix is sized to pull a portion of the carpet upwardly when the device is rotated in the first direction, and (ii) the second portion being adapted to pierce a carpet when rotated in the second rotational direction.

3) The device of claim 1, wherein the handle is integrally formed with the wire form.

4) The device of claim 1, wherein the handle is a facsimile of an object related to the game of golf.

5) The device of claim 4, wherein the facsimile represents a golf ball.

6) The device of claim 1, wherein the wire form comprises a composite material.

7) The device of claim 1, wherein a section of the second portion proximate the first portion distal end is straight.

8) The device of claim 1, wherein a section of the second portion distal end is generally hook shaped.

9) The device of claim 1, further including a sheath covering the wire form.

10) The device of claim 5, further including a sheath covering the wire form, wherein the sheath substantially resembles a golf tee.

11) A device for lifting up a portion of a carpet, the device comprising:

   a handle; and
   a wire form comprising integrally formed first and second portions,
   the first portion being coupled to the handle at a first portion proximal end and integrated with the second portion at a first portion distal end, the first portion including a helix spiraling from the first portion proximal end to the first portion distal end along a longitudinal axis, and
   the second portion extending from the first portion distal end to a second portion distal end, the second portion extending outwardly and upwardly relative to the longitudinal axis, the second portion distal end having a sharp point.

12) The device of claim 11, wherein (i) the helix being sized to pull a portion of carpet upwardly when the device is rotated, and (ii) the second portion being adapted to pierce a carpet.

13) The device of claim 11, wherein the second portion substantially comprises a hook.

14) The device of claim 11, wherein the second portion generally forms an acute angle relative to the longitudinal axis.

15) A method of practicing putting on a floor having a carpet, the method comprising:

   lifting one or more sections of the carpet off of the underlying floor ½"-6", creating one or more sloped surfaces;
   putting a golf ball across the sloped surfaces.

16) The method of claim 15, wherein said lifting comprises:

   piercing the carpet with a helically-shaped wire form; and
   rotating the wire form in a first direction.

17) The method of claim 15, wherein said lifting comprises:

   piercing the carpet with a wire form having a first helically-shaped portion spiraled in a first direction and a second portion at least partially spiraled in a second direction;
   raising the carpet by rotating the device in the second direction; and
   rotating the device in the first direction.

18) The method of claim 15, wherein:

   the carpet includes a perimeter; and
   the perimeter is coupled to the floor.

19) The method of claim 15, wherein said lifting comprises:

   piercing the carpet with a wire form having a first helically-shaped portion and a second portion generally forming an acute angle with the longitudinal axis;
   raising the carpet by hooking the carpet onto the acute angle; and
   rotating the device.

20) The method of claim 16, further including:

   removing the wire form from the carpet by rotating the wire form in a second direction.