Dec. 24, 1935. W. H. STAYTON ET AL 2,025,183

PORTABLE PUTTING GREEN

Original Filed Dec. 9, 1930

Fig. 1.

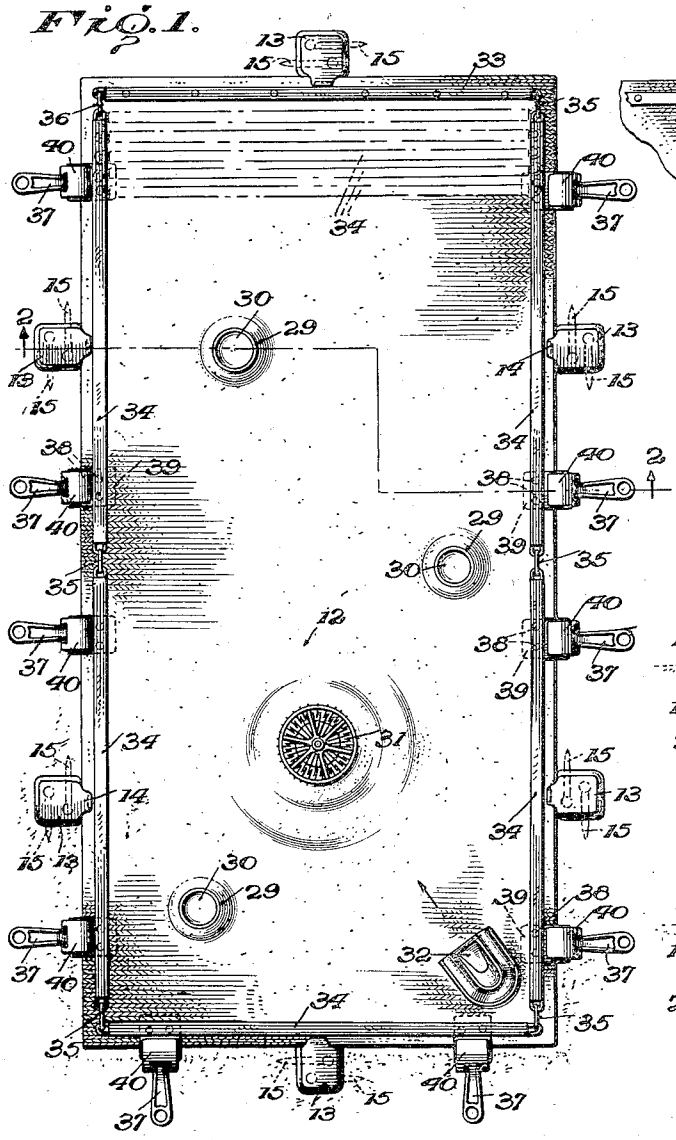


Fig. 3.

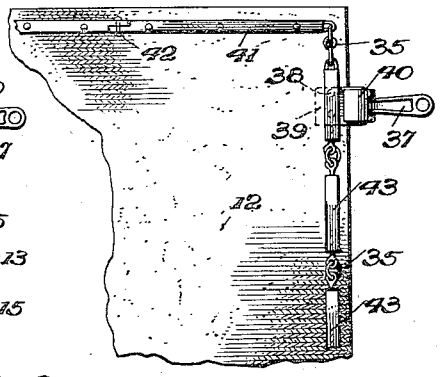


Fig. 4.

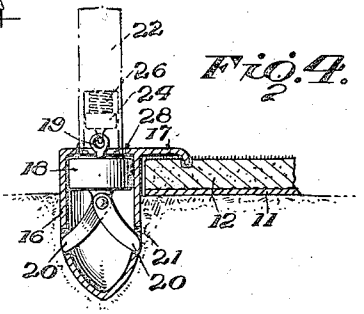


Fig. 5.

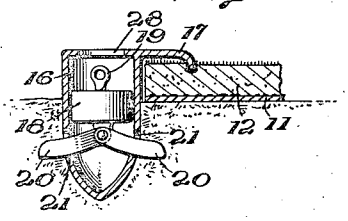


Fig. 2.

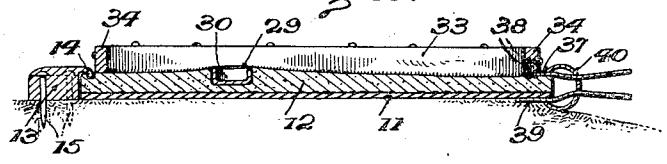
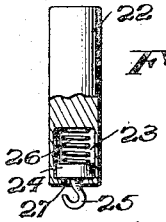


Fig. 6.



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PORTABLE PUTTING GREEN

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Original application December 9, 1930, Serial No. 501,134. Divided and this application January 5, 1933, Serial No. 650,338

8 Claims. (Cl. 273—32)

This invention relates to the game of golf, and more particularly to portable putting greens.

Due to the widespread popularity of the game of golf, and to the natural desire of players of the game to improve the quality of their play, various devices have been produced and many artificial makeshifts resorted to in order to simulate as closely as possible actual playing conditions at a point remote from a regular golf course in order that practice and amusement might be obtained. Since putting is perhaps the most important single element of the game, as theoretically half of all the golf strokes should be taken on the putting green, it is natural that the majority of the practice devices have been adapted to this feature of the sport. Of the many devices heretofore suggested and employed for the purpose of allowing practice in putting, there may be mentioned hole simulating devices adapted to be placed upon the floor of an ordinary carpet, artificial putting boards of various kinds containing one or a plurality of holes, and miniature golf courses of the well known type comprising artificial putting surfaces and hazards laid out in alleged simulation of a regular golf course. Perhaps the closest and best approximation of putting has been provided by the placing of cups or holes in a natural grass lawn and then closely cutting the grass so as to approach the texture of the usual putting green.

All of the means hitherto employed, however, are subject to one or more disadvantages or objections. For instance, most of the hole simulating devices fail to accurately reproduce actual putting conditions since they usually require that the ball be putted up over some sort of elevated member before it can reach the cup, or because of the inclusion of some other detail not found in the actual game. Likewise, artificial putting boards and miniature golf courses fail to offer the same shots and to reproduce the same conditions which exist on an actual green, and are more or less limited in their field of use because of such factors as size and portability. Even the use of a natural grass lawn is often objectionable because of the injury received by the grass due to the necessity for cutting holes therein for the cups and from the imprints of heels and general wear and tear due to continual walking thereon by the players. It is also evident that this most natural reproduction of putting is not portable or available for use under all circumstances, but is limited to an out-of-doors installation, the use of which is greatly modified by such factors as weather conditions, available space and the like.

It is therefore one of the objects of this invention to provide a portable putting green which closely simulates the characteristics of an actual green and faithfully reproduces the conditions encountered in the regular game of golf, and which is adaptable for use indoors and out, in all seasons and climates, and under all other conditions which might be encountered and which usually render the use of artificial devices impracticable or impossible.

Another object is to provide a portable putting green which may be placed upon the ground or lawn without the necessity for digging holes therein, and which will otherwise protect the ground or grass from wear and tear.

A further object is to produce a portable putting green which is pliable and flexible so as to conform to the contour of the surface upon which it is laid, and which offers the same surface friction to the rolling of a golf ball thereover as the grass provides on a usual green.

Still another object is to provide an artificial putting green closely simulating a real green which may be readily transported from place to place and therefore be available for use under a maximum of varying conditions.

A still further object is to provide a portable putting green embodying novel means for preventing the balls from rolling off the green.

Other objects include the provision of a portable putting green the surface of which not only approximates the texture of a golf green but is also sufficiently rugged to resist the wear occassioned by continual walking thereon; is non-absorbent of water; protects the surface upon which it is placed; and is simple in structure, economical to manufacture, and efficient for the purpose intended.

These and other objects will appear more fully from a consideration of the detailed description of the invention which follows. Although several embodiments of various portions of the invention have been described and illustrated in the accompanying drawing, it is to be expressly understood that the drawing is for the purpose of illustration only and is not to be construed as defining the scope of the invention, reference being had for that purpose to the appended claims.

In the drawing:

Fig. 1 is a plan view of one embodiment of the present invention;

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is another embodiment of the border or

railing forming the means for preventing the balls from rolling off the green;

Fig. 4 is another form of the device for anchoring the green to the ground;

Fig. 5 is a view showing the anchoring device of Fig. 4 in expanded position; and

Fig. 6 is a sectional view of a tool for expanding and extracting the anchoring device of Figs. 4 and 5.

It will be understood that the various parts shown in the drawing are not drawn to scale, but that certain ones have been enlarged beyond their true proportions to the others in order to more clearly disclose the details thereof.

Referring now to the drawing, wherein like reference characters indicate like parts throughout the several views, there is disclosed in Fig. 1 one embodiment of the present invention comprising a novel portable putting green or mat which is pliable and flexible so as to conform to the contour of the surface upon which it is laid, various hole simulating devices either fixed in or adapted to be placed at any desired position upon the putting surface, border or railing means for preventing the balls from rolling off the mat, and means for attaching the border to the mat and the mat to the surface on which it is laid.

The putting green or mat itself, as best shown in Fig. 2, comprises a flexible base 11 of any suitable, substantially non-hygroscopic material, such as water-proofed fabric or rubberoid, and a resilient or pliable putting surface 12 which is ribbed, fibered or roughened so as to closely simulate the texture and surface friction of an actual grass putting green. One form of suitable putting surface may be made of a woven or knitted fibrous material, such as binder twine, and may be secured to the base in any desired manner, as by means of rubber cement or the like. Surface 12 is also preferably colored green, thereby further increasing its resemblance to an actual putting green. The putting green or mat may be made of any desired size or shape, that shown being only in the nature of an illustration. By constructing the mat of flexible material, it is evident that it will conform to the shape of whatever surface it is laid upon, thus making it possible to vary the contour of the putting surface at will either by changing its location, or by placing objects under the mat. Furthermore, being of a non-hygroscopic material it is not easily damaged by the weather, nor rendered unfit for use by being rained upon. Surface 12 is made of sufficiently rugged material to resist the wear occasioned by continual walking thereon, thereby also protecting from similar injury the surface upon which it is placed.

Although a mat of the nature above described would normally lie flat upon or conform to the contour of the surface upon which it is laid, suitable means may be provided, if desired, for anchoring the mat to said surface. As shown, such an anchor may comprise a substantially rectangular block 13 of wood or other suitable material, having a toothed arm 14 projecting laterally from its upper surface and adapted to bite into the resilient surface 12 of the putting green. A pair of oppositely directed diagonal spikes 15 may then be driven through holes in the block into the ground or other surface to which the mat is to be secured.

Another form of anchoring means which may be used is shown in Figs. 4, 5 and 6. In this embodiment, a substantially bullet-shaped body portion 16, adapted to be driven into the ground, is provided with a toothed arm 17 projecting laterally from the flat base of body 16 and adapted to bite into the surface of the putting mat in a manner similar to that described for arm 14. The interior of body portion 16 is hollow, and contains, slidably housed therein, a plunger 18 having an eye 19 secured to its upper surface, and a pair of pointed arms or blades 20 pivotally secured to its bottom. The outer ends of arms 20 are normally housed within openings 21 formed in body portion 16 adjacent its lower end, and are adapted to be forced outwardly through said openings when plunger 18 is forced downwardly within the bore of body portion 16, thereby penetrating the earth or other substance upon which the putting green is laid, and securely anchoring the latter thereto.

A novel anchor tool is also provided comprising a substantially cylindrical body portion 22 in the lower end of which is formed a recess 23 within which is slidably housed a piston-like member 24 having formed integrally therewith and extending downwardly therefrom a hook member 25. A coil spring 26 is provided between piston member 24 and the base of recess 23 to normally force said piston member downward so that hook 25 projects beyond the bottom of body 22 through an opening 27 which is slightly smaller than piston member 24 so as to prevent the latter from moving out of recess 23, and yet sufficiently large to allow the passage therethrough of hook 25.

In using the anchor tool, to expand an anchor from the position shown in Fig. 4, hook 25 is first passed through ring 19 of plunger 18, and then body portion 22 of the anchor tool forced downwardly through an opening 28 formed in the top of body portion 16 of the anchor until it rests upon the top of plunger 18, at which time spring 26 has been compressed to allow upward movement of piston member 24, hook 25 and ring 19 within recess 23. The anchor may then be expanded by hammering or otherwise exerting pressure upon the upper end of the anchor tool, arms 20 of the anchor being forced outwardly through openings 21. To extract the anchor when in the position shown in Fig. 5, hook 25 is passed through ring 19 and arms 20 are withdrawn into body 16 of the anchor by pulling upwardly upon the anchor tool. Opening 28 is sufficiently smaller than plunger 18 to prevent the latter being pulled out of body portion 16.

With portable putting devices, and especially those which are adapted for use upon the lawn or the floor of a house, it is especially desirable that the hole simulating devices used in conjunction with the mat be such as not to necessitate any openings being cut in the surface upon which the mat is laid. A simple form of hole or cup of this character may be constructed as shown in Fig. 2, wherein putting surface 12 is given a slight gradual increase in thickness adjacent the location of the hole, and a cylindrical recess 29 is formed in surface 12, but not extending to or through base 11. If desired, a suitable cup 30 may be placed within recess 29.

Although a hole formed in the manner just described may be satisfactory for some purposes, it is necessarily fixed in location and therefore does not enable the maximum possibilities in the nature of diversified shots. Consequently, any suitable means for simulating golf cups or holes in a portable putting green which are portable

about the surface of the green and require no holes to be cut therein may be used in conjunction with the putting mat of the present invention. Two such devices, especially adapted for use with the mat just described, are indicated at 31 and 32, and are fully disclosed and claimed in our earlier application, Serial No. 501,134, filed December 9, 1930, of which this is a division.

In using the putting green or mat shown in Fig. 1, it is desirable that suitable means be provided to prevent the balls from rolling off the green and thereby causing annoyance to the players, and possible injury to the surface upon which the mat is laid. Novel border or railing means have therefore been provided for the mat which not only prevent this undesirable escape of the balls from the green, but also are so constructed as to provide a core about which the mat may be rolled up for ready portability. As shown, the border means may comprise a plurality of jointed sections of wood or other suitable material which may be secured to the edges of the mat in any desired manner, and also be foldable along one of said edges so as to form a core about which the mat may be rolled up.

In Fig. 1, the border comprises a fixed section 33 which may be riveted or otherwise securely fastened to one edge of the mat, and a plurality of detachable sections 34 which are connected to one another and to fixed section 33 by suitable universal couplings or joints 35, the coupling at one of the ends of fixed section 33 embodying a snap link 36 which may be readily disengaged so as to disconnect fixed section 33 and its adjacent detachable section 34. If desired, suitable means may also be provided for temporarily attaching the movable links 34 to the edges of the mat, the form of attaching means shown in Figs. 1 and 2 comprising a spring clip having one arm 37 secured to the underside of section 34 as by nails or screws 38, the other arm 39 of the clip being slightly longer than arm 37 and adapted to engage the underside of base 11 of the mat. The resilient grip of arms 37 and 39 is provided by a split spring steel cylinder 40 through which said arms extend in both directions.

If it be desired that the border means be more flexible than the form just described, so as to conform more accurately to the contour of the mat when the latter is laid upon an uneven surface, a suitable jointed border may be provided as shown in Fig. 3, wherein the fixed section of the border comprises a plurality of short sections 41, each of which is separately attached to the mat by rivets, and pivotally connected to its adjacent section by means of an overlapping joint and horizontal pin connection indicated at 42. The detachable sections also comprise relatively short lengths 43 which are connected by any suitable means such as links 35, and which are detachably connected to the mat by spring clips similar to those previously described.

In spreading out the mat for use, detachable sections 34 or 43 of the border means are placed along the edges of the mat and secured thereto, if necessary, by the spring clips described. When it is desired to roll up the mat, so as to carry it indoors or from one place to another for use, the spring clips are detached from the mat, snap link 36 is disconnected, and the border is folded parallel to the fixed section thereof, as indicated by the dotted lines in Fig. 1, so as to form a core about which the mat may be readily rolled. The rigidity which this foldable border provides to the rolled up mat also makes it easier to transport the latter, especially in mats of considerable size.

In using the novel portable putting green provided by the present invention, the mat may be laid out upon the lawn, or upon any other surface indoors or out, any desired number of hole simulating devices placed about the green, and putting enjoyed under conditions which closely simulate in all respects putting upon an actual green. If permanent holes, such as those shown in Fig. 2, are provided in the green, and certain ones are not desired for use, suitable plugs may be placed within recesses 29 so as to eliminate those holes which it is not desired to use. Putting may then be practiced in the usual manner, or putting games may be indulged in, in which case it may be desirable to provide the hole simulating devices with suitable numbering means to distinguish the various holes. The putting green may also be used in conjunction with a suitable pitching mat which may be located at any desired distance from the putting green and from which balls may be pitched to the green, and then holed out. Still another use to which it is contemplated that the portable green described herein may be put, is as a substitute or temporary green for actual grass greens on full size golf courses during the winter or other times of the year when it is desired to suspend play upon the regular greens.

There is thus provided by the present invention a new and useful device for affording practice and amusement in the putting feature of the game of golf. A portable putting green has been provided which accurately reproduces the characteristics of an actual putting green and which is yet readily movable and adaptable for use either indoors or out, and under all conditions which might otherwise render play upon a regular green or other heretofore known artificial devices impractical or impossible. The novel green provided may be used upon any surface without the necessity for cutting any holes therein, and is especially well adapted for use upon the lawn, in which case it not only avoids the necessity for cutting a hole, but also protects the lawn from the wear and tear occasioned by playing thereon. The putting mat is made of substantially non-hygroscopic material so as not to be damaged by the weather, and is also so flexible and pliable that it will conform to the contour of the surface on which it is laid and be readily rolled up for easy portability. The putting surface of the green is so constructed as to offer substantially the same surface friction to the rolling of a golf ball thereover as the grass provides on an ordinary green, said putting surface at the same time being practically impervious to wear and injury from the feet and clubs of the players. Novel border means have been provided for the putting mat herein disclosed which not only prevent the balls from rolling off the green, but also provide a suitable core about which the mat may be rolled up. The entire putting device thus provided is simple in structure, economical to manufacture, and fulfills its purpose in a most satisfactory manner.

It will be obvious that the invention is not limited to the forms shown in the drawing, but is capable of a variety of mechanical embodiments. For example, any suitable type of flexible border may be substituted for the forms shown and described; coiled wire rubber molding or beads of suitable material strung upon a wire might constitute acceptable substitutes. Also, any other desired form of anchoring means may be used in

place of those shown for securing the mat to the surface upon which it is laid, and said anchoring means may also constitute the means for securing the border to the mat. The mat itself, of course, may be of any desired size and shape, and of any suitable material provided that the surface approximates that of an actual golf green and that the mat is substantially non-hygroscopic so as to be quickly and easily dried out without injury from the weather. Various other changes, which will now appear to those skilled in the art, may be made in the form, details of construction and arrangement of the parts without departing from the spirit of the invention, and reference is therefore to be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

1. An artificial putting green comprising a base, a putting surface, said base and putting surface being of flexible material and adapted to be rolled up for portability, border means for said putting surface substantially conformable to the contour taken thereby, and means for detachably connecting said border means to said putting surface at a plurality of spaced points along each of the edges thereof.

2. An artificial putting green comprising a base, a putting surface, said base and putting surface being of flexible material and adapted to be rolled up for portability, border means for said putting surface substantially conformable to the contour taken thereby comprising a plurality of jointed sections, and means for detachably connecting said border means to the putting surface at a plurality of spaced points along each of the edges thereof, said border means being foldable against one another to form a core about which the green may be rolled.

3. An artificial putting green comprising a base, a putting surface, said base and putting surface being of flexible material and adapted to be rolled up for portability, hole simulating means disposed entirely above said base for representing a cup in said putting surface, border means for said putting surface comprising a plurality of jointed sections and means for detachably connecting said border means to the putting surface at a plurality of spaced points along the edges thereof, said sections being foldable against one another to form a core about which the green may be rolled.

4. A portable putting green comprising a base, a putting surface, said base and putting surface being of flexible material and thereby adapted to be rolled up for portability, and border means for said green including a section fixedly secured to said green, a plurality of jointed sections hingedly connected to each other and to said fixed section and foldable against said fixed section to form a core about which the green may be rolled, and means for detachably securing said jointed sections to said green at a plurality of spaced points along each of the edges thereof.

5. A portable putting green comprising a base, a putting surface, said base and putting surface being of flexible material and thereby adapted to conform to the contour of the surface upon which said green may be placed and to be rolled up for portability, border means for said green having a section thereof fixedly secured to said green and a plurality of jointed sections hingedly connectible to and foldable against said fixed section to form a core about which the green may be rolled, and means for detachably securing said jointed sections to said green at a plurality of spaced points along the edges thereof, each of said border sections being substantially comformable to the contour taken by the green.

6. A portable putting green comprising a flexible base of substantially non-hygroscopic material, a putting surface secured to said base consisting of a knitted fibrous material, and border means for said putting surface comprising a plurality of jointed rail sections adapted to extend around and above said putting surface and means for detachably connecting said sections to said putting surface at a plurality of spaced points along each of the edges thereof.

7. A portable putting green comprising a flexible base of substantially non-hygroscopic material, a putting surface secured to said base consisting of a knitted fibrous material, hole simulating means disposed entirely above said base for representing a cup in said putting surface, and border means for said putting surface substantially conformable to the contour taken by said green comprising a plurality of jointed rail sections and means for detachably connecting said sections to said putting surface at a plurality of spaced points along each of the edges thereof, said sections being foldable against one another to form a core about which the green may be rolled.

8. An artificial putting green comprising a mat of flexible material having a putting surface thereon, means for temporarily anchoring the edges of said mat to a supporting surface, border means substantially conformable to the contour taken by said mat for preventing balls from rolling off said putting surface, and clamp means carried by said border means for detachably connecting said border means to said mat at a plurality of spaced points along each of the edges thereof.

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