A foldable unit adapted to play mini-golf by putting thereon and arranged to play a multi-hole game there with by arranging the same into the desired number of different configurations. A variable mini-golf unit including a plurality of floor sections interconnected by a plurality of connecting ramp sections, the sections being pivoted end to end and having lateral side walls to form a continuous floor path, legs pivoted to each floor section to selectively elevate the latter relative to other floor sections, angularly adjustable deflection bars pivoted onto floor sections onto the floor path to vary the difficulty of putting a ball into a hole, and the sections being of progressively increasing width to be folded one within the lateral confines of the side walls of another to form a compact package.

10 Claims, 12 Drawing Figures
VARIABLE CONTOUR MINIATURE GOLF DEVICE

This invention relates to a mini-golf unit of the type adapted for putting thereon.

A putting game played on commonly called mini-golf courses has recently gained widespread popularity. In these mini-golf courses the putting is practiced outdoor onto artificial surfaces provided by separate units of different but fixed complexity; one for each hole of a simulated 9-hole or 18-hole golf course.

It is a general object of the invention to provide a mini-golf unit of the above type which is suited to be played indoor and to provide the excitement and challenge of a multi-hole golf course without having to use separate units.

It is another general object of the invention to provide a mini-golf unit of the above type which may be varied to form simulated golf fairways of different complexities and configurations for multi-hole play thereon.

It is a further general object of the invention to provide a mini-golf unit of the above type which is adapted to be played indoor or outdoor and which includes at least one adjustable obstacle to vary the par of the corresponding hole.

It is a still further general object of the invention to provide a mini-golf unit which is collapsible or foldable for convenient storage to be particularly suited for indoor use where space is at a premium.

It is a more specific object of the invention to provide a mini-golf unit which includes a plurality of floor sections and obstacles which are constructed and arranged to be adjusted and thereby produce a large variety of different configurations and difficulties from which a selected 9-hole or 18-hole may be played and which sections are adapted to fold the unit into a compact package for convenient storage.

The invention will now be described in detail with reference to a preferred embodiment thereof which is illustrated, by way of example only, in the accompanying drawings, in which:

FIG. 1 is a plan view of a mini-golf unit according to invention, illustrated in extended operative position.

FIG. 2 is a side elevation view of the mini-golf unit of FIG. 1.

FIG. 3 is a broken away side elevation view of the same mini-golf unit shown in a particular configuration.

FIGS. 4 and 5 are partial cross-sectional views as seen along lines 4—4 and 5—5 respectively in FIG. 1.

FIG. 6 is a side elevation view of a plug used to close a hole of the unit according to the invention.

FIG. 7 is a partial cross-sectional view as seen along line 7—7 in FIG. 1 illustrating the pivotal connection between a starting floor section and a connecting ramp section.

FIGS. 8 and 9 are cross-sectional views corresponding the view of FIG. 7 but illustrating two other pivoted positions of the interconnected sections.

FIG. 10 is an enlarged detail view of FIG. 1 illustrating the adjustability of a deflection bar.

FIG. 11 is a cross-sectional view as seen along line 11—11 in FIG. 10.

FIG. 12 is an elevation view of the same mini-golf unit shown in folded compact package.

The illustrated mini-golf unit includes a plurality, in this case four, floor sections 1, 2, 3 and 4 interconnected by connecting ramp sections 5, 6 and 7. These floor and ramp sections are arranged into end to end adjoining relationship to form a continuous floor path or surface. The mutually adjoining sections are pivoted to the other by a piano type hinge 8, as best shown in FIGS. 7, 8 and 9.

Each floor and ramp section is formed with a floor panel 9 having substantial strength to carry at least one player and having downwardly bevelled faces 10 at the opposite ends thereof. The bevelled faces 10 are formed to allow downward as well as upward pivoting of any one section relative to an adjoining one. The floor panel 9 of each floor and ramp sections is covered by a carpet 11 of any suitable kind and preferably green to be more suggestive of a golf fairway. Each floor and ramp sections is provided with a pair of opposite lateral side walls 12 which are arranged along the opposite sides of the floor path or surface. The widest floor section 4 is also provided with an end wall 13.

A set of four extendible and retractable legs 14 are pivoted substantially at the corners of each floor section 1, 2, 3, and 4 against the outside of the opposite lateral walls 12 thereof and about transverse axes relative to these sections. An abutment block 15 is associated to each leg 14 and secured and arranged against the outside of the corresponding lateral wall 12 to allow the corresponding leg 14 to abut in operatively extended elevating position against thereof, as all shown in FIG. 2. The abutment block 15 is preferably formed with an inclined abutment face such that the leg will be forced against the latter in extended position under any weight acting thereon. Each leg 14 may preferably be pinned into retracted position in any suitable manner, not shown. It must be noted that other types of extendible legs are also possible within the spirit and scope of the invention to achieve the objects in view.

The narrowest floor section 1 may preferably be provided with a transverse starting line 16 marked thereon in any suitable manner. The widest floor section 4 has three, or any convenient number of holes 17 adapted to receive the putted ball 18. A cup-shaped member 19 is secured against the underside of the floor panels 9 of the section 4 around the periphery of each hole 17, as best shown in FIGS. 4 and 5.

Plugs 20, as best shown in FIGS. 4, 5, and 6, are provided to close all but a selected one of the holes 17 to put the ball 18 into that selected hole only. The plug 20 includes a post portion 21 and a circular top portion 22 adapted to be carried by the post portion into a hole 17 to close the latter against the entry of a ball 18 therein. The plugs 20 are preferably arranged such that the top portions 22 thereof project upwardly from the upper face of the floor section 4 to form obstacles for the putted ball 18. Therefore, referring to FIG. 1, any of the three holes 17 may be left open while the other two are closed by the plugs 20.

A deflecting bar or board 23 is pivoted by a hinge 24 against the inner side of each lateral side wall 12 of each of the floor sections 2, 3, and 4. As shown in FIGS. 10 and 11, an adjustment pin 25 is mounted by a bracket 26 against each deflecting bar 23 and arranged to be engaged into any one of a corresponding set of holes 27.

Caster wheel units 28 are rigidly secured to the floor section 4 against the end thereof adjoining the ramp
section 7. Other caster wheel units 29 are pivotally secured each by a hinge 30 to the ramp section 7.

It must be noted that the above-mentioned sections are of progressively increasing width serially from the starting floor section 1 to the terminating floor section 4.

The mini-golf unit is operatively used by first fully extending or deploying the same onto a supporting surface, either outdoor or indoor as in a playroom, for instance in the configuration shown either in FIGS. 1 and 2 or in FIG. 3. Numerous other configurations may also be produced by changing the legs which are extended to elevate the one or both ends of any floor section 1, 2, 3, or 4 relative to the supporting surface or other sections. A large variety of configurations may thus be obtained for multi-hole play far exceeding the usual 9 and 18 different holes.

Besides variations in the undulations along the mini-golf unit by adjustment of the legs 14, other variations may be made by angular adjustment of one or more deflection bars 23. Thus not only different holes are produced but, the par or difficulty of the latter may be varied since the undulations, the deflection bars, and the plugs are variably adjustable obstacles.

Obviously, the number of sections, the number of deflection bars, and their location, the number of holes 17 and their location and other factors may be changed without departing from the spirit and scope of the invention defined by the appended claims.

The mini-golf unit may be collapsed or folded into a convenient compact and box-like package, as shown in FIG. 12. This is done by folding the sections in a rolling manner starting from the narrowest floor section 1 which folds over the section 2 and thereafter with the latter over the section 3. Then the sections 1, 2 and 3 on one part and the section 4 on the other part are lifted to rest upright edgewise joined at the bottom by the connecting ramp section 7. A chain or any suitable expedient may be used to secure the sections together in the box-like package shown in FIG. 12, wherein the caster wheel units 28 and 29 rollably support said package for convenience in handling.

Each piano hinge 8 can be replaced by separate hinges located in the same manner as hinges 8 but with leave extensions applied against the underside of floor panels 9 and screwed to the latter. Deflecting bars 23 can be pivoted on the floor panels 9 instead of to the side walls 12. Instead of two pairs of caster wheels 28, 29, only one pair could be provided and a lifting handle fixed to the opposite side wall 12 of section 4.

Essentially, in order to fold as aforesaid and as may be understood from the drawings, the floor sections must have proper lengths from the narrower end section to the wider end section to produce the box-like package of FIG. 12. Besides, as shown in FIG. 1, the deflection bars and the legs of each pair of successively adjacent floor sections on each side of the floor path extend substantially into the plane of the corresponding side wall of the ramp section pivotally connecting these successively adjacent floor sections. It may also be noted from the drawings that the pair of side walls of each narrower section pivotally fold into engagement between the pair of side walls of the adjoining wider section, since the pair of side walls of each section are progressively wider apart than the pair of side walls of any adjoining narrower section.

I claim:

1. A variable mini-golf unit comprising a plurality of floor sections, a plurality of connecting ramp sections alternating with said floor sections and pivoted thereto in end-to-end adjoining relationship and forming a continuous floor path therewith, said sections being of progressively increasing predetermined widths from one to the other end sections formed by said alternating sections, each of said sections having a pair of upstanding side walls extending along transversely opposite sides thereof making the pair of side walls of each of said sections progressively wider apart than the pair of side walls of any adjoining narrower section, the lengths of said floor sections being such as to permit said floor sections to be folded in a rolling manner from said one end section to said other end section, said connecting ramp sections being of progressively increasing lengths respectively from said one end section to said other end section, the pair of side walls of each narrower section pivotally folding into engagement between the pair of side walls of the adjoining wider section, leg means adjustably attached to at least one of said floor sections and constructed and arranged to elevationwise vary the spatial relationship of the latter relative to a supporting surface, and said other end section having at least one hole arranged for putting a ball therein.

2. A variable mini-golf unit as defined in claim 1, further including elongated deflection members pivoted onto at least one of said floor sections and each having an upright pivot at one end located inwardly adjacent one side wall of the corresponding floor section and pivotable to an out-of-the-way position alongside said corresponding one side wall and allowing engagement of said corresponding floor section into another of said floor sections upon folding of said sections into a compact box-like package.

3. A variable mini-golf unit as defined in claim 2, wherein said deflection members include a pair of deflection bars pivoted onto each of a plurality of said floor sections inwardly adjacent said pair of opposite side walls thereof, and each of said deflection bars includes an angular adjustment means secured thereto and cooperatively engaging the corresponding floor section for selective angular adjustment of the latter.

4. A variable mini-golf unit as defined in claim 3, wherein each of said floor sections has a plurality of adjustment holes extending into the upper face thereof arcuately around each of said upright pivots, and said angular adjustment means includes a retractable pin carried by the corresponding deflection bar and selectively engageable into a corresponding one of said adjustment holes.

5. A variable mini-golf unit as defined in claim 4, wherein said floor sections exclusively are provided with said leg means, the latter includes four legs pivoted to each of said floor sections about transverse axes thereof and abutment members outwardly secured with said legs against the opposite lateral sides of said floor sections and constructed and arranged to engage said legs and to hold the same in operatively elevated supporting position.

6. A variable mini-golf unit as defined in claim 5, wherein said deflection bars and said legs of each pair of successively adjacent floor sections on each side of said floor path extend substantially into the plane of the corresponding side wall of the ramp section pivotally connecting said successively adjacent floor sections.
7. A variable mini-golf unit as defined in claim 6, further including caster wheels secured to the widest of said floor sections and the widest of said ramp sections and constructed and arranged to rollably support said sections into a folded compact package.

8. A variable mini-golf unit as defined in claim 7, further comprising said one end section constituting a starting floor section, said other end section constituting the widest floor section and having a plurality of putting holes therein arranged to receive the putted ball, plugs selectively closing all but a selected one of said putting holes and projecting upwardly from the uppermost of said widest floor section, and hinges pivotally connecting said one end of said deflection bars to said side walls respectively adjacent thereto.

9. A variable mini-golf unit as defined in claim 1, wherein said floor section including at least one hole therein has other holes constructed and arranged to selectively put the ball therein and plugs are constructed and arranged to selectively close all but a selected one of said holes.

10. A variable mini-golf unit as defined in claim 9, wherein said plugs project upwardly from the upper play surface of said one floor section and form obstacles for said ball.