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Fabricant

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[54] **GAME HAVING TILTABLE PLAYING BOARD**

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[52] **U.S. Cl.** ..... **273/110,** 273/115, 273/134 G

[51] **Int. Cl.** **A63f 7/00**

[58] **Field of Search** 273/109, 110, 112, 113, 273/115, 116

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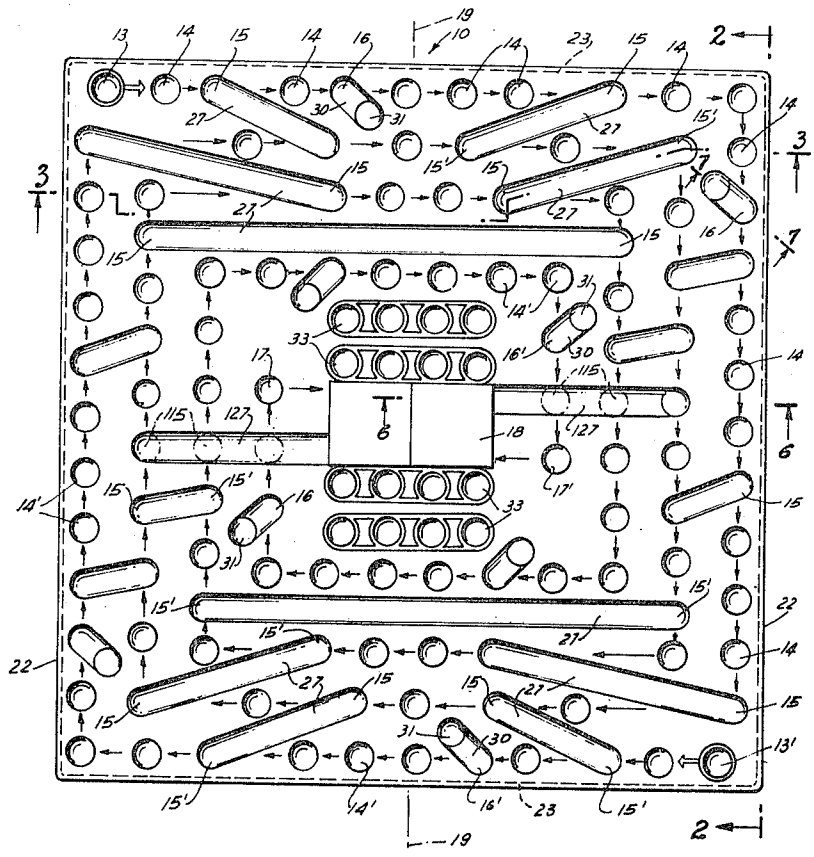
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Assistant Examiner—Harry G. Strappello
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[57] **ABSTRACT**

A game including a board and a plurality of playing pieces, which may be marbles. The board bears a path, between a starting point and a goal, comprising a series of positions which may be defined by depressions in the board. The board is supported in such a way that with one or more playing pieces on the path, it tilts downwardly in one direction or in an opposite direction, depending on the number and locations of playing pieces on each side of the tilt axis. Slides, which may be depressed channels in the board, extend between positions which are not in succession along the path; a playing piece in one such position when the board tilts moves to the other position, thereby causing it to advance or retreat along the path. The number of positions through which a player moves his playing piece during each turn is determined by chance, such as by rolling a die.

15 Claims, 8 Drawing Figures



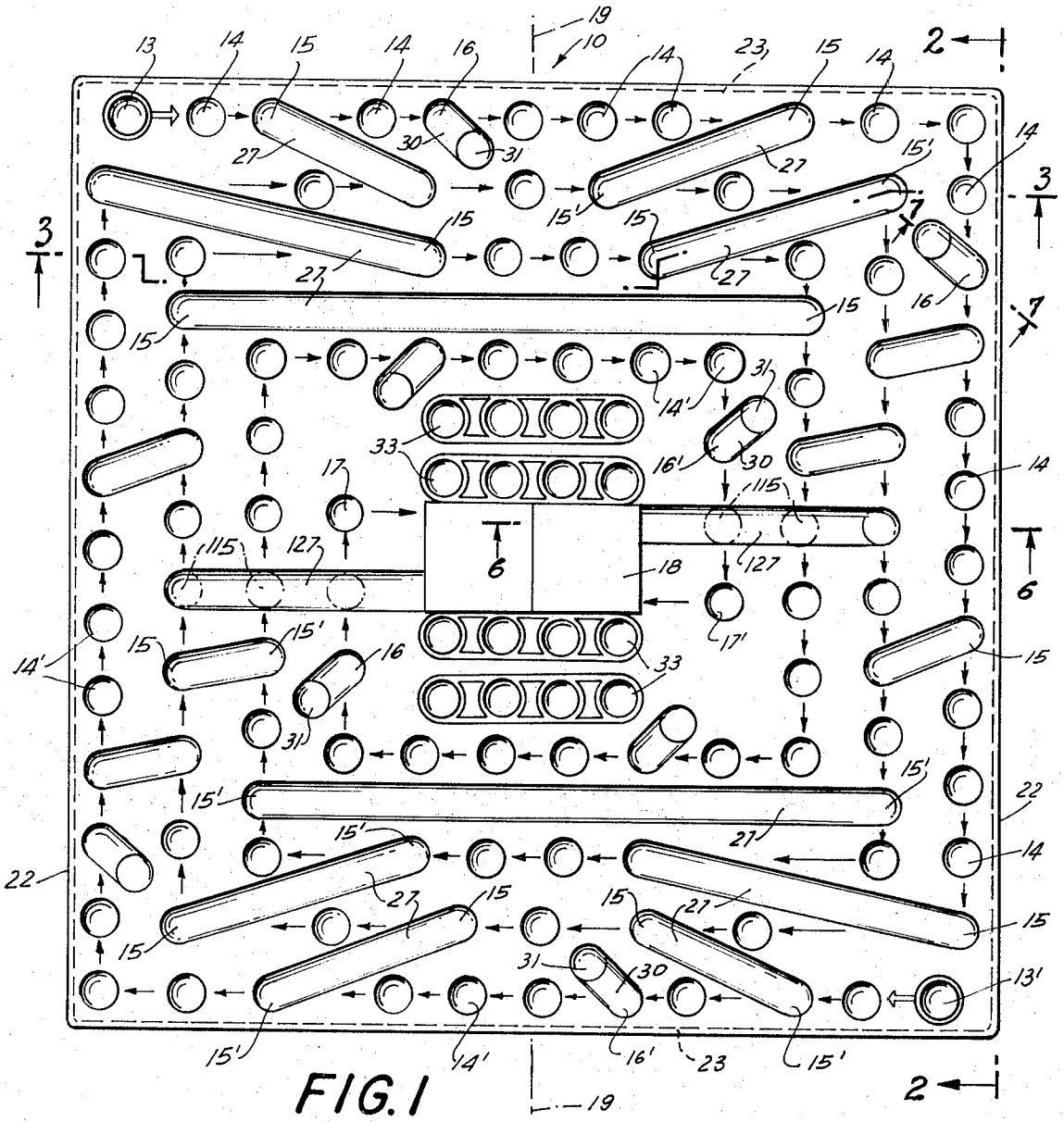

19
10
13
14
15
16
23
2
27
30
31
15'
3
7
14'
33
17
115
127
6
18
17'
22
13'

FIG. 1

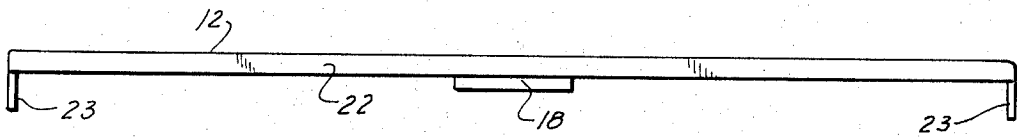

12
23
22
18

FIG. 2

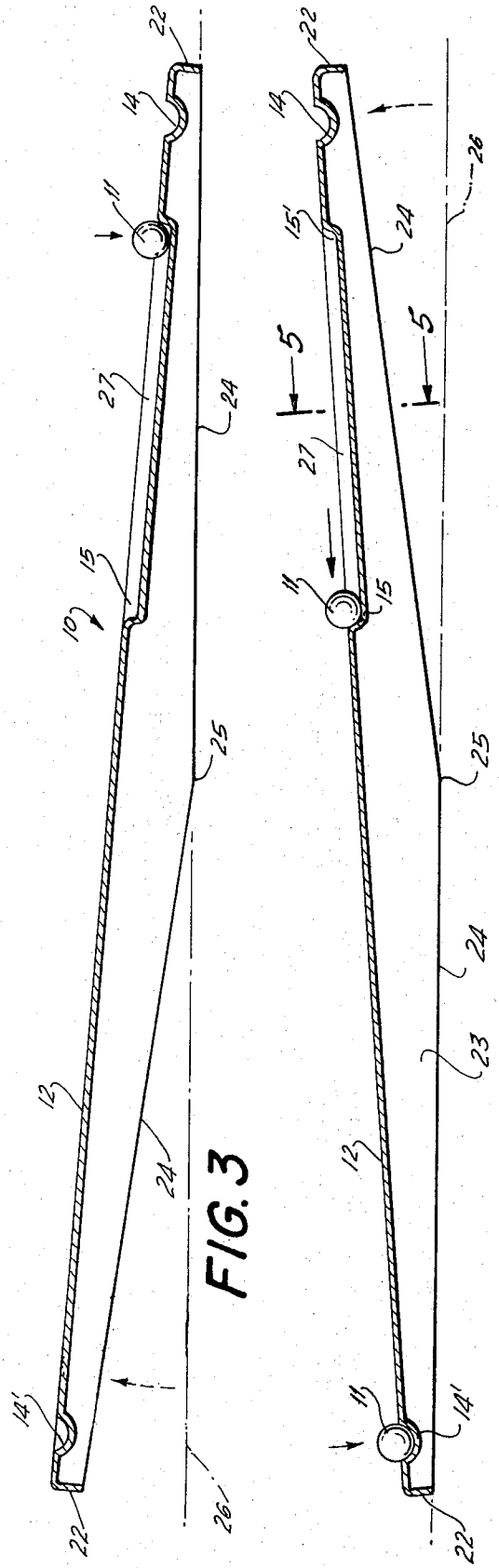


FIG. 3

FIG. 4

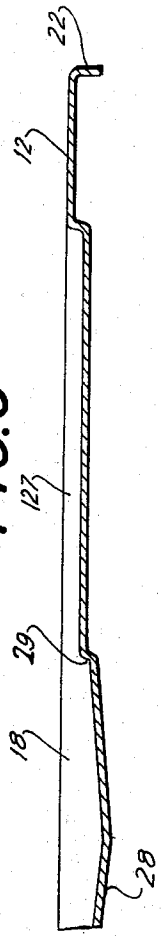


FIG. 6

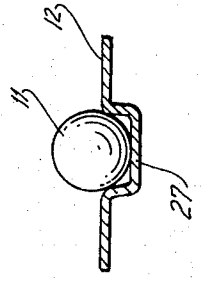


FIG. 5

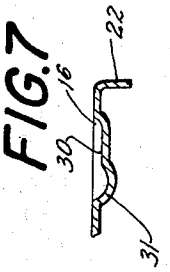


FIG. 7

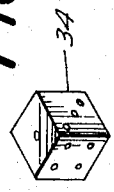


FIG. 8

GAME HAVING TILTABLE PLAYING BOARD

This invention relates to games, and more particularly to board games of the type in which playing pieces are moved along a path from a starting point to a goal.

In conventional board games, the board remains stationary in a horizontal position throughout the time the game is played. The only movement which takes place is manual movement of the playing pieces by the players. Most such games employ a device, such as dice or a spinner, for determining by chance how many positions along the path the player moves his playing piece, or pieces, during each turn. Furthermore, many board games include direction cards, or directions printed in various positione along the path, directing movement of playing pieces other than by the chance-determining device, to further add to the arbitrariness of movements of the playing pieces.

It is an object of the present invention to add a new dimension to such board games, and increase the excitement of play, by adding to the arbitrariness of movement of the playing pieces without resorting to the use of printed directions.

It is another object of the invention to provide a board game of the type described in which the board moves during play, in a manner not entirely controllable by the players, and as a result of such movement the playing pieces may move forward or backward along the path, i.e., closer to or farther from the goal, without being touched by a player.

It is a further object of the invention to provide such a board game in which the board moves between a plurality of tilted orientations in response to movement of playing pieces along the path, the number of positions a playing piece moves being determined by chance by suitable means such as a die.

Additional objects and advantages of the invention will be apparent from the following description in which reference is made to the accompanying drawings.

In the drawings:

FIG. 1 is a plan view of a playing board according to this invention;

FIG. 2 is a side elevational view of the board taken along line 2—2 of FIG. 1;

FIG. 3 is a horizontal cross-sectional view taken along line 3—3 of FIG. 1, showing the board tilted in one direction;

FIG. 4 is a view similar to FIG. 3 showing the board tilted in the opposite direction;

FIG. 5 is a fragmentary vertical cross-sectional view taken on line 5—5 of FIG. 4;

FIG. 6 is a fragmentary horizontal cross-sectional view taken on line 6—6 of FIG. 1;

FIG. 7 is a fragmentary cross-sectional view taken on line 7—7 of FIG. 1; and

FIG. 8 is a perspective view of a die.

The game chosen to illustrate the present invention comprises a board 10 and playing pieces 11; the latter may be spherical elements such as are commonly referred to as "marbles".

Board 10 has an upper playing surface 12, seen in plan in FIG. 1, bearing a path along which the playing pieces 11 are moved during play of the game. The path is in the shape of a squared spiral comprising a starting position 13, at one corner of the playing surface, a plurality of intermediate positions 14, 15, and 16, a final position 17, and a rectangular shaped goal 18. Between each two successive positions the playing surface 12 bears an arrow showing the direction in which the playing pieces are to be moved along the path. In the present example, a second squared spiral path is interleaved with the first such path. The second path comprises a starting position 13', at a corner of the playing surface diametrically opposite starting position 13, a plurality of intermediate positions 14', 15', and 16', a final position 17', and the goal 18.

Use of two interleaved spiral paths adds interest to the game, by giving the players a choice where to start their playing pieces on the journey to the goal 18. However, it is to be understood that the invention contemplates that only a single path might be used, or more than two paths might be used. Furthermore, the path or paths used need not necessarily be spiral in shape. It is desirable, however, though not essential, that the path or paths be symmetrical about a center-line of the board, indicated by the dot-dash line 19 in FIG. 1.

In the present illustration of the invention, board 10 is a single thin sheet of plastic which has been subjected to a vacuum forming operation to provide playing surface 12 with the indentations to be described, and the sides depending from the peripheral edges of the playing surface. However, obviously other materials and manufacturing techniques can be employed to fabricate the board. Furthermore, although the board is shown with a square shape, obviously other shapes can be used.

The depending sides of the board 10 comprise two skirts 22 of constant width (best seen in FIG. 2) at two opposite sides of the playing surface 12. The depending sides on the two other opposite sides of the playing surface constitute support rails 23, each having the shape best seen in FIGS. 3 and 4. The lower edge of each rail 23 includes two sections 24, which extend from opposite skirts 22 and converge downwardly to a point 25 at the center of the rail. The points 25 of the two rails 23 define an axis about which the board 10 and its playing surface can tilt between two alternative non-horizontal orientations. In the present example, the tilt axis is parallel to the center-line 19 and directly beneath the center-line when playing surface 12 is held horizontal.

Thus, when board 10 is placed on a horizontal surface, indicated by the dot-dash line 26 in each of FIGS. 3 and 4, points 25 of rails 23 touch the surface. If there is any unbalance about the tilt axis, the board will tilt in one direction of the other, as indicated in FIGS. 3 and 4, respectively, until one or the other rail edge section 24 meets the horizontal surface 26.

The positions making up the paths on the board are of three general types. Each starting position 13 and 13', each intermediate position 14 and 14', and each final position 17 and 17' is of the first type, i.e., a part spherical depression formed in playing surface 12. The positions of this type are best illustrated at 14 and 14', in FIGS. 3 and 4. It will be appreciated that a marble 11 in one of these positions, e.g., in a position 14' as shown in FIG. 4, will not be affected by tilting of the board, i.e., it will remain in its position regardless of which way the board is tilted.

Positions of the second type are identified by the reference numerals 15 and 15'. Each of these positions is joined to another of these positions by a slide 27, which is shown as a depressed channel (see FIGS. 3–5),

formed in the playing surface **12**, extending between the two positions which it joins. It will be seen that a slide **27** does not join two successive positions along a path, but instead joins two positions which are not in sucession. In most cases, a slide **27** joins a position **15** in one path with a position **15'** in the other path, although one slide joins two positions **15** in the first path, and another slide joins two positions **15'** in the second path. The important point is that each slide is so arranged that it affords an opportunity for a marble **11** located in a position **15** or **15'** to advance closer to goal **18**, by skipping a number of positions along its path, or to retreat further from goal **18**, also by skipping a number of positions.

Each slide **27** is arranged to extend in a direction generally toward and away from the tilt axis or center-line **19**, i.e., the slides are not parallel to the tilt axis. Consequently, the position a marble will occupy as between any pair of positions **15** and **15'** joined by a slide **27** will depend upon which way playing surface **12** is tilted at any particular time. For example, if a marble **11** is in position **15'** shown in FIG. **3**, it will remain in that position, until moved by a player or until the board **10** is tilted to the position shown in FIG. **4**. When the board is thus tilted, marble **11** rolls down slide **27** to position **15**. An inspection of FIG. **1** will show that such movement of the marble advances it considerably closer to goal **18**, in terms of the number of positions it must move through to reach the goal. Of course, if the marble had started in position **15** in FIG. **4** and the board then tilted to the position of FIG. **3**, the marble would roll to position **15'** and thereby retreat from the goal.

The playing surface **12** bears two slides **127** (FIGS. **1** and **6**) of special character. The form of these slides is the same as slides **27**, but they are special in that each terminates at goal **18**. Furthermore, three positions **115** are indicated within each slide **127**, but these positions are not depressed with respect to the bottom wall of slide **127**. Thus, if a marble **11** lands on any one of positions **115**, it will roll either to the endmost position **115** or it will roll into goal **18**.

Goal **18** is defined by a rectangular depression (see FIG. **6**) in playing surface **12**. The bottom wall **28** of goal **18** converges downwardly toward the center of the goal so that marbles entering the goal are retained as much as possible on the center-line **19** and hence substantially directly above the tilt axis of the board. A ledge **29** along the periphery of goal **18** prevents marbles **11** from rolling out of the goal once they enter it.

The third type of positions are identified by the reference numerals **16** and **16'**. Each of these positions is joined by a short "tilt" slide **30** (see FIGS. **1** and **7**) to a "tilt" position **31**. The tilt positions **31** are all located off their respective paths, i.e., tilt positions do not form part of any path. If when a marble **11** lands in a position **16** and **16'** that position is lower than the tilt position **31** to which it is joined by tilt slide **30**, the marble will experience no further movement. However, if the position **16** and **16'** is higher, or later becomes higher, than its associated tilt position **31**, marble **11** will roll into the tilt position.

Playing surface **12** is also formed with four rows each including four base positions **33**. Each base position is a part spherical depression similar to positions **14**. All the base positions **33** are located off the paths and they are also spaced from center-line **19** and hence from the tilt axis.

In addition to the playing board **10** and playing pieces **11**, the game also includes some means, such as a die **34** (FIG. **8**) for determining by chance how many positions a player should move his playing pieces through during each turn. Instead of a die, some other means such as a spinner may be used.

The game described above may be played with in different ways, but one possible way is as follows:

Each player (from two to four players) is given four mables **11** all of the same color and different from the color of other players' marbles. The four marbles are placed in one of the row of base positions **33**. The players begin rolling the die **34** in turn. With each roll, a player removes one of his marbles from a base position, and beginning with either starting position **13** or **13'** moves the marble the number of positions, along the chosen path, indicated on the rolled die.

As marbles **11** are moved out of their base positions **33** into positions along the paths, the board **10** will become unbalanced with respect to the tilt axis, depending on the locations of the various marbles, and hence the playing surface **12** will tilt in one direction or the other (FIGS. **3** and **4**). If a marble **11** happens to land in a position **14** and **14'** it will not be affected by tilting of the playing surface; if it lands in a position **15** or **15'**, it may be affected, as described above, and roll closer to or farther from the goal; if it lands in a position **16**, it may roll into a tilt position **31** in which case player must return that marble to a base position **33**. As the game progresses, and marbles are moved around the playing surface, the board will shift its direction of tilt from time to time and marbles in the positions **15, 15'**, **16, 16'**, and **115** will be affected either advantageously or adversely. As any one marble is moved in accordance with the roll of the die **34**, it is often not easy to predict whether movement of that marble will cause a change in tilt direction of the board; hence an element of excitement is added to play of the game. The game continues until a player succeeds in moving all four of his marbles into goal **18**.

Although the board has been shown and described as being a vacuum formed plastic sheet, other constructions which provide a tiltable playing surface could be used. For example, the board could be placed inside a stationary frame and joined to the frame by pins along center-line **19** in such a way that the board can pivot through a small angle in the manner shown in FIGS. **3** and **4**. Also, although the playing pieces have been described as spherical marbles, other types of playing pieces, such as rollers or discs could be used as long as they are capable of rolling or sliding along the playing surface when the board tilts.

The invention has been shown and described in preferred form only, and by way of example, and many variations may be made in the invention which will still be comprised within its spirit. It is understood, therefore, that the invention is not limited to any specific form or embodiment except insofar as such limitations are included in the appended claims.

What is claimed is:

1. A game comprising a board and a plurality of playing pieces, said board having a playing surface bearing a path along which said playing pieces are to be moved from a starting point to a goal, said path being defined by a series of discrete positions, through which said playing pieces are to be moved through in succession, support means defining an axis about which said play-

ing surface can tilt between two alternative non-horizontal orientations, said playing surface tilting downwardly in one direction in one of said orientations and tilting downwardly in the opposite direction in the other of said orientations, and at least one slide extending between two of said positions which are not in succession along said path, said slide serving to guide the movement of a playing piece from one of said two positions to the other when said playing surface is tilted.

2. A game as defined in claim **1** wherein said slide is not parallel to said tilt axis, whereby when a playing piece moves from one of said two positions to the other it moves closer to or farther from said tilt axis.

3. A game as defined in claim **1** wherein portions of said path are arranged in side-by-side segments, each segment comprising a series of discrete positions, and said slide extends from a position in one segement to a position in another segment.

4. A game as defined in claim **3** wherein said path follows a generally spiral arrangement.

5. A game as defined in claim **1** wherein said playing surface bears two generally spiral interleaved paths, and a plurality of slides, each slide extending from a position in one path to a position in the other path.

6. A game as defined in claim **1** including a slide from at least one of said positions to said goal.

7. A game as defined in claim **1** including a base comprising a plurality of positions for playing pieces not arranged on said path, said base positions being spaced from said tilt axis.

8. A game as defined in claim **1** including at least one "tilt" slide extending between one of said positions and a "tilt"position located off said path.

9. A game as defined in claim **1** wherein said tilt axis is parallel to the centerline of said board, and said path is symmetrically arranged with respect to said center line.

10. A game as defined in claim **1** wherein said support means extends downwardly from said playing surface, the lowermost extremity of said support means defining said pivot axis.

11. A game as defined in claim **1** wherein said board is rectangular, and said support means comprises two rails extending downwardly from two opposite sides of said board, respectively, each rail having a lower profile defining two edges converging downwardly to a point.

12. A game as defined in claim **1** wherein said slides are depressed channels formed in said playing surface.

13. A game as defined in claim **12** wherein each of said positions is defined by a depression formed in said playing surface.

14. A game as defined in claim **13** wherein said playing pieces are spherical.

15. A game as defined in claim **1** including player-operable means for determining by chance the number of positions a player is to move his playing piece.

* * * * *