United States Patent [19]

Trossman et al.

[54] **SPORTS GAME BOARD AND VARIABLE PROBABILITY CONTROLLERS**

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[52] **U.S. Cl. ....** 273/87.2; 273/134 ES; 273/134 CG; 273/134 CB; 273/87 F; 273/87 G
[51] **Int. Cl.** **A63b 71/02**
[58] **Field of Search** .... 273/87 G, 87.2, 131 C, 273/134 CG, 134 ES, 134 E, 134 DB, 134 D, 134 CB, 134 C, 134 AD

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[57] **ABSTRACT**

A sports game in which moves governed by a multiple variable probability controller are plotted on a game board. The probability of selection of the various moves governed by the controller can be varied as a function of previous moves and/or by instructional materials forming a part of the game. The controller takes the form of a pair of spinners having identical areas printed on both. The size of the areas vary depending on the chance which the player is willing to take.
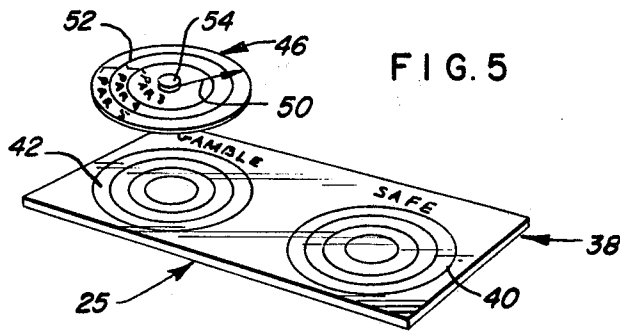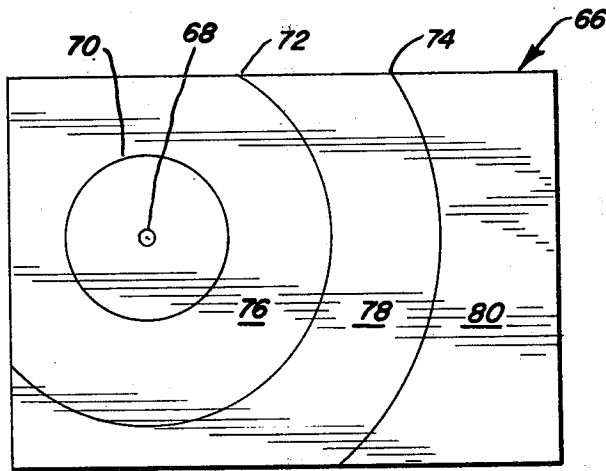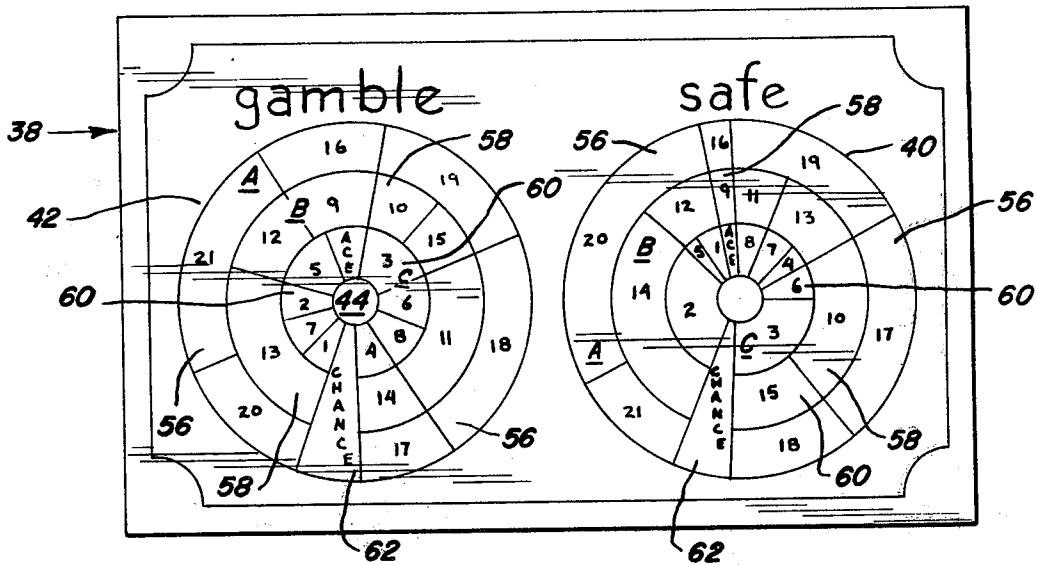
2 Claims, 8 Drawing Figures

FIG. 1

FIG.3

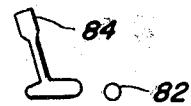
FIG.2

FIG.4

FIG. 5

FIG. 6

gamble   safe
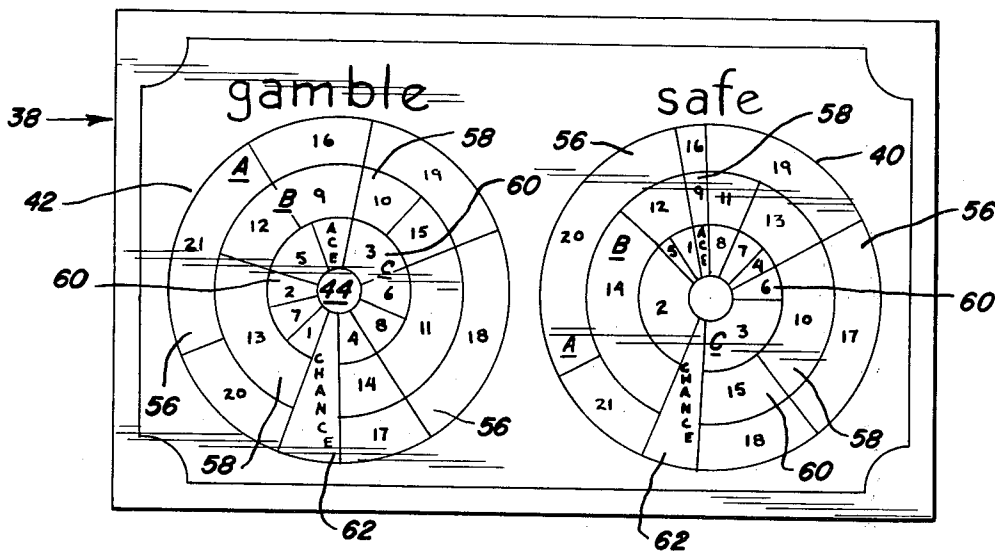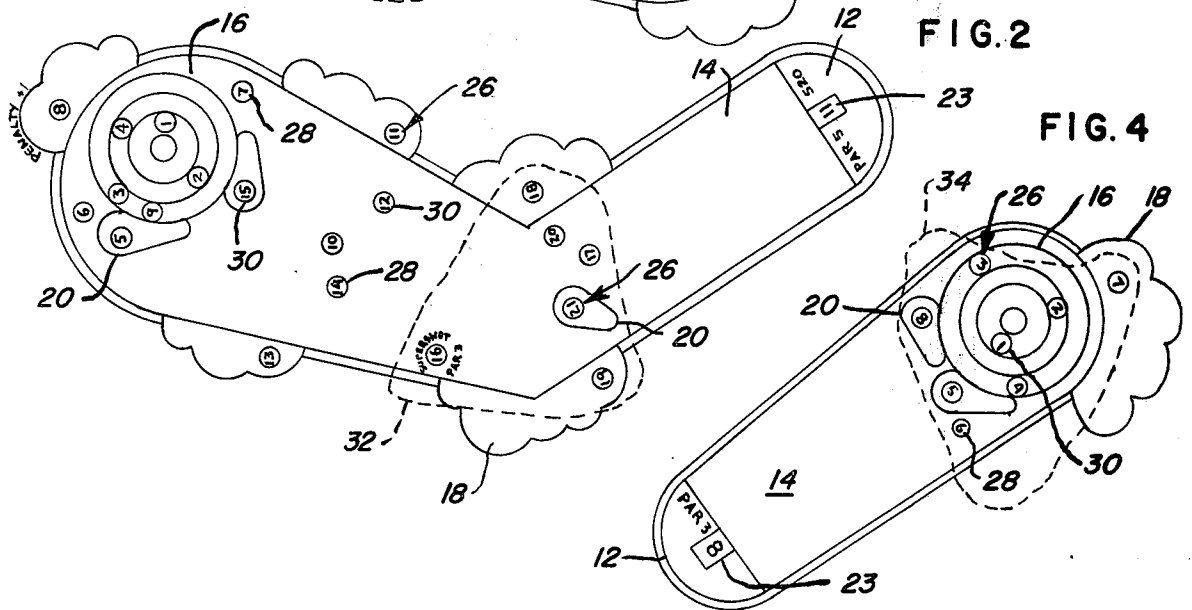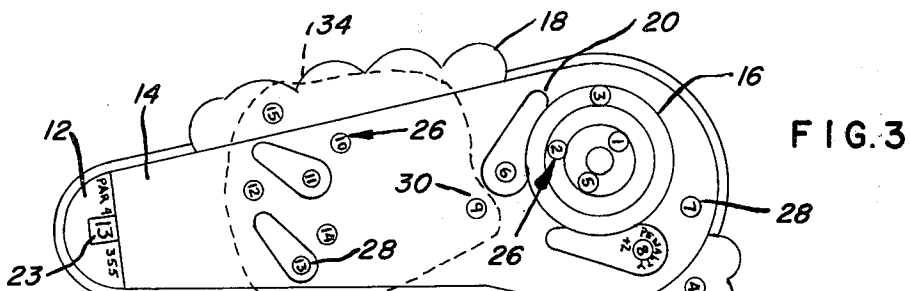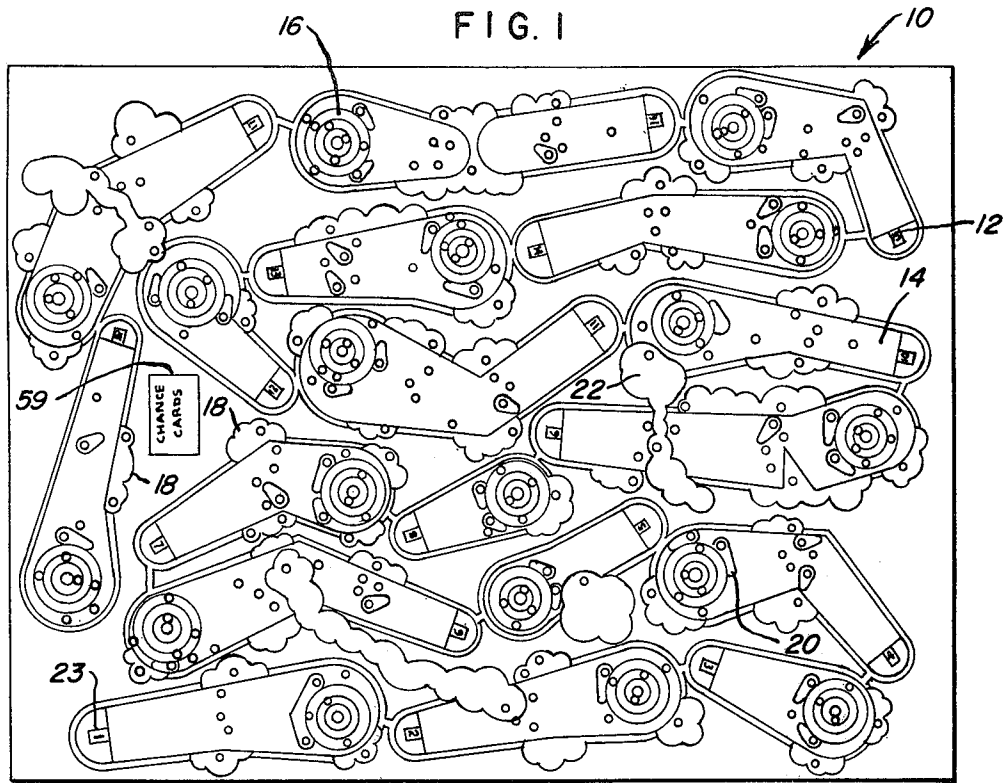
FIG. 7

FIG. 8

SPORTS GAME BOARD AND VARIABLE PROBABILITY CONTROLLERS

BACKGROUND OF THE INVENTION

The popularity of sports and of games is almost universal. Whether as a participant, or as an observer, or as a complaining "sport's widow," almost everyone is or has been involved with athletics. At the same time, one need but wander through toy departments and toy stores, noting the number of games that are available for both children and adults, to attest to their universal popularity. It is logical, therefore, that a combination of the two, sports games, have generated immense commercial appeal.

Such sports games have been particularly attractive to those who have an interest in sports, but who cannot participate in sports, either because of their age, their lack of athletic ability or because of the seasonal nature of the sport in which they are interested. Sports games, therefore, should to the degree possible, faithfully reproduce or simulate the action of the sport itself as well as having appeal as a game.

Many games have an initial appeal just because the subject matter of the game is a popular sport, but rapidly diminish in popularity because the game as played does not relate to the sport. Sports games to be successful, therefore, should somehow allow the player to "participate" in the sport. For example, in games corresponding to sports involving head to head confrontation of opponents, e.g., baseball, football, tennis, the success or nature of the game plays or moves can be made a function of interrelated moves or decisions by the players representing the opponents. In games corresponding to sports of individual skill, e.g., golf, racing, sailing, the play can be affected by options available to the player, and by possible external conditions. In both types of games, prospective moves can be affected by certain conditions precedent, e.g., the effect of previous moves. A chance or luck factor can also be introduced to enhance the entertainment value and playability of the game.

Most sports and athletics involve a degree of skill, with success being a function of the player's ability. Successful sports games, although, not utilizing the actual athletic skill of the player, should, to the extent possible, introduce factors that produce results representative of such variations in ability, although giving each player the potential to succeed. In any event, sports games, to be successful, should incorporate variables and perturbations to simulate those that do occur in the actual sport itself, either as a result of individual performances or as a result of the contest between competitors.

A variety of techniques have been employed in attempts to achieve such successful simulation. Golf games, for example, which are very popular, in part because of the popularity of golf, and in part because of the adaptability of golf to games, are a good illustration of variations in games. The popularity of golf games is reflected in the number of patents which are directed to this subject matter of which the following are a representative sample: Morch U.S. Pat. No. 1,758,581; Scheib U.S. Pat. No. 2,238,079; Snyder U.S. Pat. No. 2,478,949; Grogan U.S. Pat. No. 2,618,842; Carroll et al. U.S. Pat. No. 3,355,175; Ekstraud U.S. Pat. No. 3,410,561; Grubler U.S. Pat. No. 3,591,182; Royle U.S. Pat. No. 3,608,901; Browne U.S. Pat. No.

3,612,534; and Boileau U.S. Pat. No. 3,658,339. Some of the techniques disclosed in these patents, and in others, include the use of templates representing possible shots or possible golf clubs, charts, dice, dials, actual simulated play and combinations thereof.

In such sports games, there is an assumption that the player is familiar with the rules of the sport to which the game relates. The games are just that, games, vehicles for entertainment. None of the games, such as are disclosed patents cited above, incorporate any instructional or informational features, nor do they educate the player about the sport, about its rules, traditions, procedures, techniques, history, or facts relating thereto.

SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided a sports game which is easy to understand, which simulates the sport to which it pertains, which utilizes educational and informational materials as part of the game, and which is fun to play.

For convenience, the present invention will be described with respect to a golf game although it should be understood that the principles embodied in the present invention have equal applicability to other type games, particularly those which relate to sports.

In accordance with the present invention, a portion of the game moves, which in the disclosed embodiment represent the position of golf balls on the golf course, are plotted on a game board. These moves are governed by a multiple variable probability controller. The remaining portion of the moves may be actual simulations of the sport, e.g., an actual simulated golf stroke. The probability of success of each move governed by the controller may be modified as a function of the previous moves and/or by instructional materials forming a part of the game of the present invention.

More specifically, in accordance with the present invention, there is provided a game board incorporating a reduced scale representation of a playing field, e.g., a golf course. The holes on the golf course may conveniently represent the holes of an actual golf course, although the layout of the game board golf course may be different than the layout of the actual golf course because of space limitations on the game board. Each hole contains representations of a tee, a fairway, a green, trees or rough, sand traps or bunkers, and water or other hazards. Markers or playing pieces are used in conjunction with the game board to designate or plot game moves, i.e., the position of the golf balls during play.

The movement and placement of the playing pieces on the game board golf course are governed by a multiple variable probability controller which is used to designate the placement of the various golf shots between the tee and the green. Once the green has been reached, play reverts to an enlarged simulated green on which a miniature ball is actually putted in order to hole out.

The multiple variable probability controller includes a plurality of control elements, each of which is used to determine the results of the appropriate golf shot being played. Thus each control element can be used to play each shot, but the probabilities of possible results differ from one control element to another.

For example, if for a given shot, there are "X" possible moves, i.e., the ball can land at X locations, the por-

tion of each control element used to govern that shot will include X corresponding selections. Each possible selection does not occur with equal probability, and the probability of corresponding selections differ from control element to control element.

In one embodiment, the controller takes the form of a plurality of control elements, each being in the form of an array of shot control components, e.g., an array of concentric annular rings, one for each golf shot. If there are eight possible results for a given golf shot, e.g., the tee shot, then the shot control component or annular ring for that shot is divided into at least eight segments of unequal size. As a result, the probability that some segments will be selected is greater than the probability that other segments will be selected. Probability of shot selection can be affected in other ways, e.g., by varying the number of equal segments.

The corresponding annular rings of the other control elements may contain the same segments, but the relative size of corresponding segments will differ, thereby varying the probability that corresponding segments will be selected. The segments in each ring represent different type shot results, e.g., good shots, great shots, and bad shots. The probability of good shots versus bad shots may be greater for one control element than for another. The control elements providing for higher probability of great shots may also provide lower probability of good shots and high probability of bad shots. Numerous variations in control elements can be introduced to vary the actions of the game; such as, by including certain shots on only some control elements and by incorporating arbitrary or chance segments in the arrays.

In one embodiment of the present invention, the composite controller includes two control elements, each defining an array of three annular concentric rings. One control element is for "safe" shots, the other is for "gamble" or "in trouble" shots. The gamble control element increases the odds of playing a bad shot, when compared to the safe control element, and it also increases the odds of playing a great shot. In accordance with one approach for playing the game, a player may always gamble, but he may be prevented under certain conditions from playing it safe.

A player's options may be governed by the placement of his previous shot, by chance, or, in accordance with the instructional and informational aspects of the present invention. Instructional control conveniently is used in conjunction with each of the eighteen tee shots.

For example, a plurality of inquiry cards may be utilized. These inquiry cards may relate to any of a variety of subjects connected with the sport involved. In the illustrated golf game, the inquiry cards may pose questions relating to golf rules, etiquette, playing techniques, procedures, traditions, miscellaneous facts and history, as well as any other appropriate subject matter.

A card is drawn prior to the tee shot. If the question is answered correctly, the player then has an option to play it as he chooses. If, on the other hand, the question is answered incorrectly, the player's choices are restricted. In the example described above, if the answer is incorrect, the player is "penalized" and is required to use the gamble control element, thereby increasing the probability of a poor shot.

One advantageous aspect of this approach is that the playing of the game may involve discussion of the questions presented, particularly those questions relating to golf rules, etiquette and playing techniques. As a result, the players become familiar with various aspects of golf itself.

Thus, in accordance with the present invention, there is provided an educational and instructional game which is representative of and simulates various features of a sport, which incorporates an ability to instruct and inform the player about various aspects of the sport, in which probabilities of successful moves are varied and in which that portion of the sport least satisfactorily represented by plotting moves on a playing board is actually simulated on a reduced scale.

Numerous other advantages and features of the present invention will become readily apparent from the following detailed description of the invention and of one embodiment thereof, from the claims and from the accompanying drawings in which each and every detail shown in fully and completely disclosed as a part of this specification, in which like numerals refer to like parts.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of a game board incorporating a reduced scale representation of a golf course;

FIG. 2 is an enlarged view of a par 5 golf hole;

FIG. 3 is an enlarged view of a par 4 golf hole;

FIG. 4 is an enlarged view of a par 3 golf hole;

FIG. 5 is an exploded perspective view of a multiple variable probability controller for use in the present invention;

FIG. 6 is a plan view of the controller board of FIG. 5;

FIG. 7 is a plan view of a suitable putting green; and

FIG. 8 is a view of a miniature putter and miniature golf ball for use in connection with the putting green of FIG. 7.

DESCRIPTION OF SPECIFIC EMBODIMENT

While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail one specific embodiment, with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the invention to the embodiment illustrated.

One embodiment of the present invention as shown in the drawing is a golf game. The golf game includes a game board 10 the surface of which portrays a reduced scale representation of an eighteen hole golf course. Each of the golf holes are laid out as they might be on a real golf course and include a tee area 12, a fairway 14, a green 16, roughs or trees 18, sand traps or bunkers 20 and/or water hazards 22. Each hole is identified by a hole number 23 in its tee area 12. As in the case of a real golf course, the holes may be of varying length, each hole being designated as par 3, par 4 or par 5.

Some technique must be utilized to position the playing pieces on the game board 10 to represent the various shots taken by each player. In the embodiment of the invention shown in the drawing, as best seen in FIGS. 2, 3 and 4, the possible positions or results of the various golf shots governed by a multiple variable probability controller 25 are represented by a plurality of indicia 26. The indicia take the form of a plurality of small circular areas 28, each containing a number 30. Each circular area 28 or number 30 may be further

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characterized by an identifiable designation, e.g. a color.

The indicia 26 may be divided into groups, one group 32, e.g. a first set of numbers (16–21 being illustrated) for tee shots on par 5 holes, a second group 34, e.g. a second set of numbers different than the first set (9–15 being illustrated), for tee shots on par 4 holes and for second shots on par 5 holes, and a third group 36, e.g. a third set of numbers different than both the first and second sets (1–8 being illustrated), for the tee shots on par 3 holes and for approach shots on all holes. While the numbers in each group may be the same on each hole, the location of corresponding numbers in each group is usually different on each hole.

The further characterization of each of the indicia 26 designate what effect a shot landing thereon may have on the next shot. For example, on the par 5 hole shown in FIG. 2, and on the par 4 hole shown in FIG. 3, it is seen that of the second group of numbers 34, numbers 9, 10, 12 and 14 are in the fairway and are characterized by the color blue, while numbers 11, 13 and 15 are off the fairway, in trouble, and are characterized by the color red. Thus, one color —blue— characterizes good shots, and another color —red— characterizes bad shots. On some holes, certain shots, even though landing in the fairway are in trouble, and, therefore, are characterized by the color red. While in most instances, the same number refers to either a good or a bad shot, this is not always the case. See, e.g., the areas on each hole numbered 4.

The selection of the location of each shot, i.e., the selection of particular indicia 26, is governed by use of the multiple variable probability controller 25. The controller 25, as shown in FIGS. 5 and 6, includes a controller board 38, on the surface of which are two control elements or dials 40, 42 labeled SAFE and GAMBLE, respectively. Each dial 40, 42 takes the form of an array of three concentric rings A, B and C. A pivot 44 is provided in the center of each dial 40, 42.

A spinner 46 is provided to perform the selection process. The spinner 46 takes the form of a clear, circular disc having a pointer or radial line 50 scribed into its surface and including a plurality of identifying legends 52 for each ring. A hub 54 is adapted to rotatably support the spinner 46 on the pivot 44. As indicated by the legends 52, the outermost rings 40-A, 42-A, are labeled "Par 5," and are used for tee shots on par 5 holes; the middle rings 40-B, 42-B, are labeled "Par 4," and are used for tee shots on par 4 holes and for second shots on par 5 holes; and the inner rings 40-C, 42-C, are labeled "Par 3," and are used for tee shots on par 3 holes and for approach shots on all holes.

Each of the rings A, B and C is divided into a plurality of unequal segments 56, 58 and 60, respectively. Each segment 46, 58 and 60 is identified by a number which corresponds to a number 30 forming the indicia 26 on each hole of the golf course. The numbers in each segment 56 of the Par 5 rings A correspond to the first group 32, the numbers in each segment 58 of the Par 4 rings B correspond to the second group 34, and the numbers in each segment 60 of the Par 3 rings correspond to the third group 36.

As seen in FIG. 6, the corresponding annular rings A, B and C of the dials 40, 42 may contain the same number of segments and may contain all of the numbers associated therewith. The areas of corresponding segments in each dial 40, 42 differ considerably. By com-

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paring the numbered segments in each corresponding ring with the corresponding indicia 26 on any golf hole, a number of observations can be made.

Those numbered locations which are for "good" shots, shots that will land on the fairway, or on the green, have larger segments in the rings of the safe dial 40 than in the gamble dial 42. Correspondingly, those areas on each ring which would result in a shot landing in a sand trap, in a hazard, in the rough or in the water, are larger in the gamble dial than in the safe dial, as are approach shots, which do not land on the green. In addition, it will be noted that for each annular ring, one of the segments corresponds to an exceptionally good shot or an ace. These segments are quite small in each ring of the safe dial and are somewhat larger for each ring in the gamble dial.

Thus, as is the case in real life, while the chances of outstanding success are greater when a gamble is taken, the chances for mistakes and poor shots are correspondingly greater.

Each dial 40, 42 also includes a chance card wedge 62 which spans all three of the concentric rings. If the spinner points to this, the chance wedge 62, then the player is directed to draw one of a plurality of chance cards located in space 59 on the game board 10 thus introducing some measure of luck into the game. These chance cards may also be drawn if a player lands on one of the small areas 28 which is adjacent to an instruction to draw a chance card.

A variety of chance cards may be used, e.g., a card that can be retained by the player to allow him to spin the safe dial when otherwise required to spin the gamble dial, a card forcing him to spin the gamble dial, penalty cards or relief cards. While these cards do introduce a degree of uncontrollable chance into the game, this does increase the entertainment value.

The instructional or informational part of the game in introduced at the beginning of each hole. The game includes a plurality of question cards 64 which include various types of questions on various subjects. Samples of such questions and their general subject matter are:

Technique: "If you are putting with the grain and have a 30 foot putt, you should play it as though it were (a) 35 feet (b) 25 feet (c) 30 feet (d) 60 feet (e) 15 feet."

History: "Who was the first golfer to win one million dollars as a professional?"

Rules: "A hole 490 yards long would have a par of ———————."

To start play, a player draws one of the question cards 64 from a dispenser 65 and attempts to answer the question. If he answers the question right, he has the option to spin either the Gamble spinner or the Safe spinner. If he does not answer the question correctly, he must spin the Gamble spinner. It is at this point in the game that a good deal of discussion can arise with respect to the questions and the right answers (printed on the back of the question cards) particularly those relating to rules and technique.

The player spins the spinner 46 and moves his marker to the area 28 on the hole containing a number 30 corresponding to the number of the segment 56, 58 or 60 over which the line 50 comes to rest. If the number is "blue," he is entitled to spin either the Safe or the Gamble spinner on his next shot. If the number is "red," he must spin the Gamble spinner on his next

shot. Play continues in this vein until the player reaches the green.

Referring to FIG. 2, a par 5 hole, the following is an explanation of how the hole might be played. Before teeing off, the player draws a question card 64 and attempts to answer the question. He answers correctly and spins the SAFE spinner 46. Since he's teeing off on a par 5 hole, he refers to the outermost ring 40-A. Let's say he lands on a segment 56, numbered "18" corresponding to a red-numbered area 28 in the rough 18. On his next turn, he must spin the gamble spinner 46 and refer to the center ring 42-B. He spins and lands within a segment 58, numbered "14" in a SAFE position. He spins the SAFE spinner on his next shot, referring to the innermost ring 40-C and a segment 60, numbered "5." He's now in a trap 20 and must spin the GAMBLE spinner referring to the innermost ring 42-C, which comes up on a segment 60 numbered "2," on the green 16.

Once the ball has reached the green 16, on the game board 10, play reverts to an enlarged simulated putting green 66, FIG. 8. The putting green 66 is surfaced with a suitable material to simulate a real green. The green includes the cup 68 and is divided by circular lines 70, 72 and 74 into a plurality of sections 76, 78 and 80 corresponding to the circular areas on the playing board greens 16. A miniature ball 82 is placed on the putting green 66 in the section 76, 78 or 80 which corresponds to the area on the green 16 in which the player's ball landed. The player uses a miniature putter 84 to putt the ball 82 until he "sinks" it.

Thus, in accordance with the present invention, there has been disclosed a sports game, illustrated as a golf game, in which a portion of the moves are plotted on a game board, the results of such moves being determined by a multiple variable probability controller. The probability of the results of various moves is determined in part by the instructional and informational aspects of the game and in part by the results of previous moves. There is also provided means by which certain aspects of the sport may be reproduced and certain moves of the game are actual simulations of the sport involved. The game of the present invention is entertaining, fun to play, provides a realistic representation of the sport involved and, in addition, incorporates informational and instructional features relating to the sport to assist the player in learning about the sport which is the subject matter of the game.

From the foregoing, it will be observed that numerous variations and modifications may be effected without departing from the true spirit and scope of the novel concept of the invention. It is, of cousre, intended to cover by the appended claims all such modifications as fall within the scope of the claims.

We claim:

1. A golf game comprising: a game board portraying a reduced scale representation of a golf course having a plurality of golf holes of varying length, a plurality of numerical indicia on each golf hole, each of said numerical indicia representing the location of a possible golf shot, said numerical indicia being divided into three mutually exclusive groups, one group representing locations of possible tee shots on par five golf holes, a second group representing possible tee shots on par four golf holes and second shots on par five holes, and a third group representing possible tee shots on par three holes and approach shots on all holes, each of

said numerical indicia being further characterized by one of a first and second color, the first color being indicative of shots in trouble, and the second color being indicative of remaining shots, a multiple variable probability controller comprised of a pair of control elements, each control element including an array of three annular concentric rings corresponding respectively to each group of numerical indicia, each of said concentric rings being divided into a plurality of unequal segments corresponding in number to the number of numerical indicia in the group of indicia corresponding to the particular ring, each segment having a numerical designation identical to the numerical designation of one of said numerical indicia, the size of the corresponding segments of the corresponding rings in each of the control elements being different, a pivot formed in the center of each array and a spinner rotatably supported on said pivot and having an indicator thereon to select one of the segments in each ring when the spinner comes to rest after rotation, means for selecting the control element to be utilized for tee shots including a plurality of inquiry cards each containing a different question relating to the game of golf, one of said control elements being utilized in response to the incorrect answer and either of said control elements being utilized in response to a correct answer, said indicia colors governing the selection of said control elements for subsequent shots, said one color requiring use of said one control element, and a simulated putting green containing a recess thereon to define a simulated cup adapted to receive a miniature ball, and defining a plurality of areas corresponding to areas on the playing board greens which include numerical indicia, said miniature ball being placed on said simulated putting green in a position corresponding to the position of the selected indicia on the game board green, and a miniature putter adapted to be retained in one hand for putting the miniature ball along the surface of said simulated putting green and into said simulated cup.

2. A sports game comprising a game board portraying a reduced scale representation of the playing field associated with the sport and adapted to have thereon a plurality of game moves; means including a plurality of indicia on said game board for locating each of the possible results of said moves on corresponding portions of said game board; variable probability controller means for selecting each of the moves to be plotted on said game board, said controller means including a plurality of control elements, each of said control elements defining an array of concentric rings each designating one of the selectable moves the results of which are to be plotted on said game board, there being one ring for each selectable move; each of said control elements further including means designating the possible results of each of the selectable moves to be plotted on each game board defined by each of said rings being divided into a plurality of unequal segments, each segment defining one of the possible results of the moves designated by said ring, the corresponding rings of each control element designating the same move and including a segment for each possible result of the move designated thereby; said move result designating means of each said control elements defining a probability for selection of the possible results of each move, said move result designating means of one control element defining a probability of selection of at least some of the results of at least one move different from the prob-

ability for those results defined by the move designating means of another of said control elements in that at least one of the segments in each corresponding ring designating the same result of the same move being unequal, whereby the probability of selection of said one result of said move differs as a function of the control elements utilized; each control element including at least one segment corresponding to each of said indicia; means uniquely identifying each of said indicia and the corresponding segments of said control elements; each of said indicia including means defining an additional characterization thereof governing a selection of the control element to be used for the next move, whereby the probability of the selection of various results of at least some moves is determined by the results of a previous move.

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