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Trachtman

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[54] **PUCK-TYPE APPARATUS**

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[52] **U.S. Cl.** ..... **273/126 R**

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[58] **Field of Search** ..... 273/126 R, 118 R, 119 R, 273/85 R, 85 G, 108, 109, 134 E, 56, 85 G

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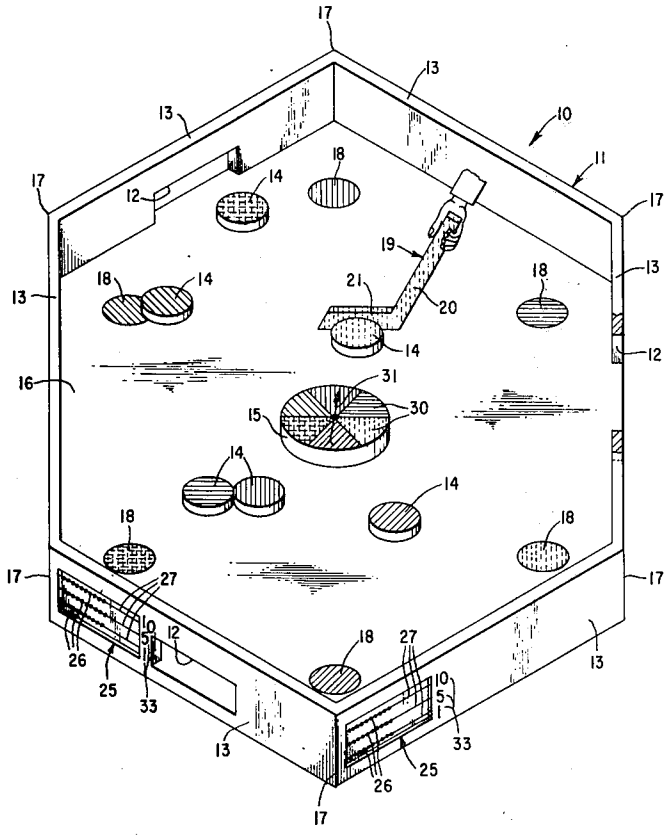
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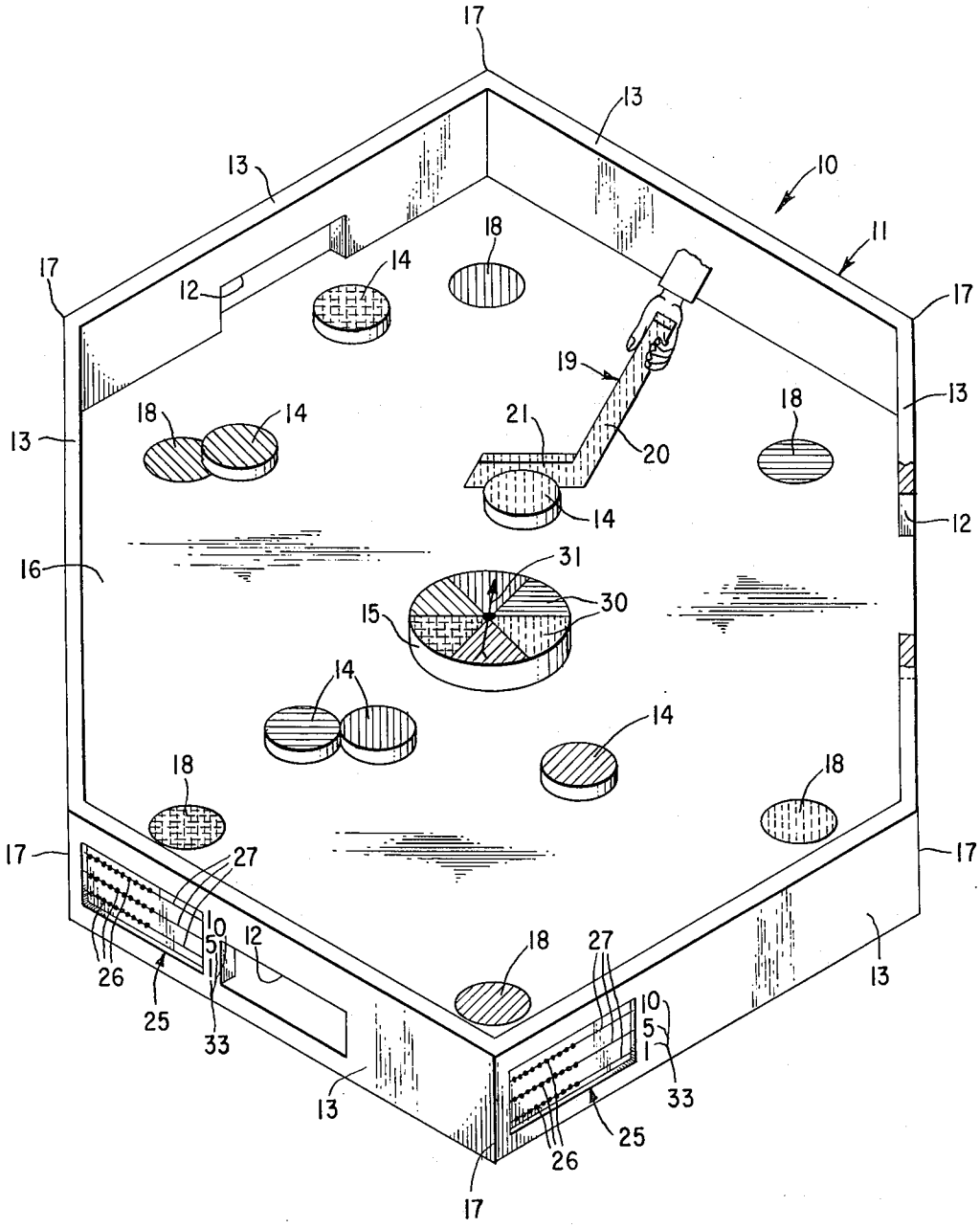
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[57] **ABSTRACT**

A puck-type game apparatus includes a plurality of pucks striking sticks for moving the pucks, and a polygonal shaped game board. The board has an outer periphery and retaining rim which includes openings therein. The game uses a plurality of player-identifiable colored starting spots located on the surface of the board, and a plurality of pucks and striking sticks. The scoring of the game awards points to a player for each striking of another puck and a greater number of points for each ejection of an opponent's puck through one of the openings.

1 Claim, 1 Drawing Figure





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PUCK-TYPE APPARATUS

BACKGROUND OF THE INVENTION

This application is a continuation of U.S. application Ser. No. 168,021, filed Aug. 2, 1971 (now abandoned).

This invention relates generally to games, and more particularly to a scoring game employing pucks which are caused to move when struck as by sticks.

In the past, numerous games usable at home have been devised in an attempt to simulate sports activities of various kinds, and which require a large play area. Some attempts have endeavored, for example, to simulate the game of ice hockey directly, or have attempted to incorporate some of the basic principles of hockey into a similar type game. An example of the latter type game is one popularized as "Knock Hockey". These prior games are generally limited to the purpose of directing a single puck to a single goal area.

SUMMARY OF THE INVENTION

It is, therefore, an object of the present invention to provide a novel game which uses striking implements for directing a puck so as to strike other pucks of other players in the game.

It is another object of the present invention to provide a game which uses striking sticks for directing pucks to strike other pucks so as to cause them to leave the playing surface.

It is a further object of the present invention to provide a game employing a polygonal-shaped game board, having openings in sides of the board, which uses a striking stick for directing a puck to strike other pucks in the game.

It is still a further object of the present invention to employ a plurality of color-matched sticks, pucks, starting spots, and a board in a hockey-type game usable at home and which permits a plurality of players to take part in the game.

It is still another object of the present invention to provide an exciting, sports-related type game which simultaneously provides substantial educational value directed to improve early color recognition and numerical skills.

It is still an additional object of the present invention to provide a game which improves physical coordination, particularly eye-hand coordination which is basic to any number of games and sports activities.

It is yet another object of the present invention to provide a relatively simple, economical to produce, yet sufficiently nonrepetitive game so as to provide long-term playing interest in a sport-related activity.

In accordance with the present invention, a game apparatus comprises a game board having a laying surface and a plurality of sides forming a boundary in the shape of a regular polygon, preselected sides of the boundary having an opening for permitting the escape of a puck. The game board also has a plurality of designated positioning spots for locating the start of play, each of the spots located near a corner of the boundary. A plurality of pucks, each initially for positioning on one of the spots, and subsequently for being slidingly propelled along the surface of the game board are included. At least one striking stick is included for propelling one of the pucks so as to strike other pucks and force other pucks through the boundary openings, scoring points being awarded for each such striking and a greater number of points being awarded for each ejection of another puck through the opening.

For a better understanding of the present invention together with other and further objects thereof, reference is made to the following descriptive drawing while the scope of the invention is pointed out in the appended claims.

BRIEF DESCRIPTION OF THE DRAWING

Referring to the FIGURE:

The single FIGURE is an isometric representation of the game board of the present invention as used during the course of play.

DESCRIPTION AND OPERATION OF THE INVENTION

Referring to the FIGURE shown there is the basic game board **10.** The board includes a plurality of sides **13,** forming a retaining rim or boundary **11.** The boundary **11** is preferrably shaped in the form of a regular polygon. As illustrated, the preferred form is a regular hexagon which accomodates from 2 to 6 persons during play. It should be evident that the principles of the invention are equally applicable to polygons having greater or fewer sides which may be irregularly constructed to provide a certain randomness during play. Alternate sides of the boundary **11** include openings **12.** As will be explained further below, these openings are sufficiently wide to permit the escape of a puck from the playing surface. The openings **12** are approximately centered along each side **13.** It may be desirable to include a net (not shown) or cup external to each opening to enable an ejected puck to be retained. The openings are alternated to allow sufficient caroming action to sustain game interest.

A plurality of starting spots **18** are located on the board surface **16.** Each starting spot is preferably located near a corner **17** of the polygonal boundary. On the starting spots are disposed a plurality of pucks **14** at the start of play. The preferred location of the starting spots near a corner provides maximum opportunity to strike many of the other pucks even on the first player turn.

It is desirable that the starting spots and the pucks each have a different identifiable color. At the start of play, each of the pucks is on its own corresponding color spot **18.** The purpose of the color identification is to enable each player to keep track of his puck and starting position during play.

The manner of propelling a puck **14** with a hockey-type stick **19** is also shown in the FIGURE. The shaft **20** of the stick **19** is grasped by hand and the striking portion **21** is placed upon the surface of the board **16** adjacent to the puck **14** to be struck. This very much simulates the striking of a puck by a hockey stick in an ice hockey game. It is preferred that a stick be provided for each player to speed up the flow of the game. Fewer sticks may be provided if desired but at least one stick is necessary in order to play the game. When the number of sticks is the same as the number of players, it is desirable that the sticks be color identified with the corresponding color identified pucks and starting spots. In other words, each player has a different and uniquely colored starting spot, puck and hockey stick to facilitate play. This is particularly important for younger children who may otherwise find it difficult to remember their puck and starting position. The color identifi-

cation is another important feature in a game which may be played by children since it provides educational reinforcement to their color-distinguishing abilities. The sticks **19** may be made of wood or plastic or any other suitable material.

Also shown in the FIGURE is a single, optional central obstacle **15** which is intended to provide a complication to the game and provide further game interest. This obstacle or other similar obstacles located or inserted elsewhere on the board may be of circular shapes as shown or some other desired geometric shape, and provides a caroming surface for the propelled pucks during play. Any of the obstacles may be removed or inserted such as by screw or peg from above the board.

It may be desired to have the top surface of center obstacle **15** appropriately divided into a number of pie-shaped, colored wedges **30** which correspond to the different starting positions **18** and pucks **14.** Centrally rotatably mounted on obstacle **15** is pointer or arrow **31.** This arrangement may be used to determine the starting player in the game. The arrow is struck by any player's finger and the color where the arrow comes to rest determines which player goes first. A preferred form of keeping score during play of the game is also depicted in the FIGURE. A plurality of abaci **25** are provided at each corner of the polygon to keep score for the player whose starting spot is closest to that corner. Each abacus **25** preferably includes three wires **27** having a number of beads **26** on each wire. Each wire normally carries ten beads, although a greater or lesser number may be utilized. As will be explained one of the rows carries beads for single scoring points, another row carries 5-point beads, and a third row carries 10-point beads. Corresponding indicia **33** are included adjacent to each row of the abacus.

The method of play is such that each player takes successive turns. Play begins with each puck on its corresponding color-identified starting spot. It is desired that all pucks be so positioned even when less than the maximum number of persons play in order to maintain maximum interest, difficulty and excitement during play. Thus, even if only two persons play, all six pucks are initially positioned on their corresponding starting spots and remain on the board during the game. After initially determining which player starts, play usually proceeds clockwise around the board with each player shooting once during his turn. Using his stick **19** to propel his puck **14,** each player attempts to strike other pucks with his puck or causes some other puck to strike a third. For each puck so struck or caused to move, one single point is awarded, the score being indicated on the appropriate abacus. If a player causes another's puck to leave the board by being directed through any one of the openings **12,** five points are awarded and indicated on the abacus. Every puck remains where it is at the end of a shot. The sole exception is that any puck propelled through an opening is returned to its appropriate starting spot.

The scoring may be modified to penalize a player who directs his own puck through an opening inadvertently. A given number of points (e.g. ten points) would then be deducted from his score or he may be forced to miss his next turn. This penalty is called a "scratch".

The primary purpose of the game, then, is to score the greatest number of points. This can either by done over a predetermined time interval or when a given number of points is reached.

It should be understood that the scoring of the game represents an important educational aspect in a game which is also directed to developing physical skills. Basic counting skills are learned and improved by the entering of one and five point scores on appropriate portions of the abacus **25.** It is preferred that ten beads of the one's row be grouped into two sets of five, each set having a different color. This will foster the recognition of the number concept "5" and will prompt and remind the player to transfer the score of five one's to the "5" row. Similarly, the ten beads on the "5" row may be color grouped in pairs to prompt transfer of a score of two 5's to the "10" row. This procedure is seen to be a counting one which teaches and reinforces basic addition skills.

The concept of a "scratch", whereby a penalty is exacted against a player for letting his own puck escape from the board, teaches the subtraction process. If ten points are deducted for a scratch, the player must transfer those beads representing points already awarded to the other side of the abacus. The equivalence of a single "10" bead, two "5" beads, a "5" bead and five "1" beads, and ten "1" beads is also taught in the scoring process which corresponds to modern educational methods of teaching equivalent sets.

As a further variation in the scoring procedure, the openings **12** may be assigned different point values. For example, a multiple system may be used where one opening yields normal point values, a second opening yields doubled values and a third yields trebled values. This adds further educational value in the teaching of multiplication concepts. This version should accordingly be reserved for somewhat older children or players.

If a player strikes another puck and causes it to leave the playing surface through an opening, he is compensated a certain number of play pennies (e.g. five) by the other player. If a player causes a playerless puck to leave the playing surface, the bank compensates him in a similar manner. If no puck is struck by a player other than his own or if he causes his own puck to leave the playing surface, hhe has "scratched" and is penalized by paying the bank a certain number of play pennies (e.g. two). In this method of playing, pucks having lost their pennies are recovered with a play penny prior to each players turn.

The game will end when one player loses all of his pennies. At that point, the other players count their pennies and the one with the largest number, wins. Additional rounds may be played in the event of a tie. In an alternative method of play, when one player wins a given number of pennies, the game may end.

The use of play pennies in the play and scoring of the game creates the additional problem of storing these pieces in a convenient place. One possibility is to employ central obstacle **15** as a hollow storage space for the play pennies. The cover of the obstacle would have the arrow for commencing play as described above. This arrangement would also enable the central obstacle to serve as the penny bank during play of the game.

Other storage arrangements may also be effectively used. For example, attached to the three sides of the board which do not have openings, may be storage compartments. Such storage compartments could be used to store the sticks, pucks and individual containers

for each player's supply of play pennies. These containers could also be color-identified. Such storage arrangements would preferably have a cover with spring action and would be sloped downward toward the player.

Alternatively, individual containers for the play pennies may be attached at each corner of the board. These containers would have space for some 40 pennies and could be calibrated so that an instant count of the number of pennies accumulated could be determined at any time.

It should be evident that many variations or design modifications of the present invention are possible without departing from its basic concept. The board may, for example, take on various sizes or shapes. The holes or openings can similarly be designed in various sizes, shapes and placed in different positions around the board to make the game more or less difficult. This is particularly of importance if different forms of the game are intended to be marketed to substantially different age groups. Nets may be provided beneath each opening for convenience of recovering the pucks. The pucks may be either solid or ring-shaped and may be of various degrees of resiliency depending on the material used. Ball bearing rollers may be affixed to the bottom of the pucks to speed up play and create further excitement in the game. The sticks may be of various sizes, shapes, and shaft slopes depending upon the particular age of the players intended. Instead of the hockey-style shaped sticks described above, a stick in the shape of a shuffle-board style, that is, one with an arcuate shaped opening at its end, may be used. For purposes of variety, sticks may be constructed having a shuffleboard type opening at one end and a hockey type style at the opposite end. While the game generally is more exciting with the use of sticks, pucks could also be struck by the flick of a player's finger.

While the game is primarily one of manual dexterity and skill, the game may be complicated and made dependent on chance and less on skill if desired. For example, magnets may be inserted in the various pucks and also randomly distributed and imbedded and hidden in the board. This would cause misdirection and veering of a puck as it was moving over the surface of the board. The central obstacle **15**, if constructed as a polygon, could also be used to provide more chance aspects to the game. The obstacle could be motor-driven to provide a continuously rotating caroming surface. This would be difficult to compensate for during the course of play which results in greater interest and excitement during the game.

It should also be realized that the board may be constructed with or without legs for support, depending upon the ultimate selling cost desired. The board itself may also be constructed with a resilient bumper material around the boundary to speed up the caroming action of the pucks.

While the foregoing specifications and drawings represent the preferred embodiment of the present invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the true spirit and scope of the present invention.

What I claim as my invention is:

1. A game apparatus comprising:

A game board having a playing surface and a plurality of sides forming the shape of a regular polygon, preselected sides but less than all sides of said boundary having an opening for permitting the escape of a puck, said game board also having a plurality of designated positioning spots for locating the start of play, each of said spots located near a corner of said boundary;

at least one raised obstacle located at the central portion of the game board;

means for determining the starting player, said means rotatably mounted on the obstacle and including pointer and a plurality of color coded segments, said pointer adapted to being struck so as to come to rest on one of said color coded segments, the player whose puck color has been so determined commencing the play of the game;

a plurality of pucks, each initially for positioning on one of said spots, and subsequently for being slidingly propelled along the surface of the game board; and

at least one hockey-style shaped stick for propelling one of said pucks so as to strike other pucks and force other pucks through said boundary openings, points being awarded for each such striking and a greater number of points for each ejection of another puck through an opening.

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