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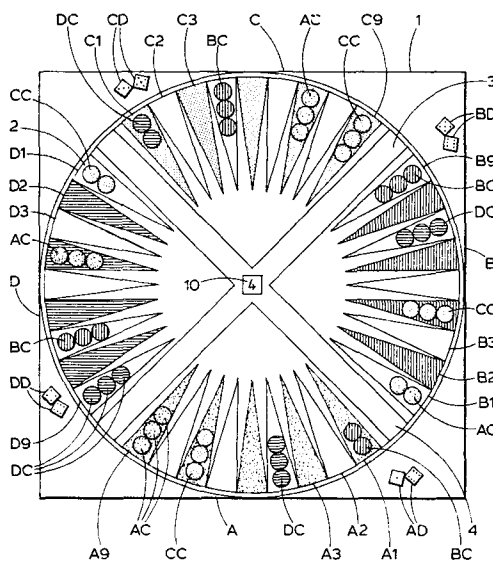
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Board Game.

A board game (1) has a circular playing area (2) diametrically divided by two orthogonal bars (3, 4) to thereby form quadrants (A, B, C, D). Each of the quadrants is divided into nine points (A1-A9, B1-B9, C1-C9, D1-D9) and alternate points around the playing area have the same colour, but the remaining points in each quadrant are of a different colour. The game may be played by two to four inclusive players each allocated a particular quadrant and a set of counters (AC, BC, CC, DC) is provided for each player. The counters are initially arranged in predetermined positions and the object of the game is for a player allocated to one of the particular quadrants to move his counters having the same colour as his differentiating colour segment back to that segment and thence to bear the counters off the board; the first player to bear his allocated counters from the board being the winner.



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BOARD GAME

This invention relates to a board game which is a Backgammon-like game, but which is an extension of Backgammon in much the same way as hexagonal and three-dimensional Chess are extensions of the game of Chess. The term "board" as used herein is meant to include any suitable form of support means which may for example be made from one of cardboard, wood or cloth.

The game of Backgammon is well known and for details as to how to play Backgammon reference may be made to "Win at Backgammon" by Millard Hopper published by Dover Publications Inc, 180 Varick Street, New York, N.Y. 10014, ISBN0-486-22894-0. As described in the forenoted publication, Backgammon is essentially a board game for two players utilising a square or rectangular board with a series of twelve isosceles triangles having their bases facing each player along opposing sides of the board and with a bar extending from one player to another and bisecting the triangles of each player. Thus the board is arranged such that six isosceles triangles are provided with their bases facing each player in one half of the board which may be denoted "whites" home table and "blacks" home table respectively (assuming white and black counters respectively are used) and on the other half of the board, are six further isosceles triangles having their bases directed toward each player. The triangles for "whites" home table, say, are numbered 1-6 from the right hand side of the board (as viewed by white) and black's isosceles triangles in his home table are numbered 1-6 from the left hand side of the board (as viewed by black). The remaining isosceles triangles on the side of the board adjacent to white and black respectively are given virtual numbers 7-12 inclusive and referred to as "white's" or "black's" outer table respectively. The term "virtual number" has been employed since the isosceles triangles in the respective outer tables are not in fact numbered on the board. With such an arrangement, the isosceles triangles are given alternate colours in a continuous direction around the board, so that triangle 1 on "white's" home table may, for example, be coloured white, whereas the opposing triangle in "black's" home table numbered 1 may be coloured black.

White has white counters and these are set up as follows:

5 counters on white's home table numbered 6,

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3 counters on white's outertable virtual number 8,
5 counters on black's outer table virtual number 12, and
2 counters on black's home table No. 1.

Black's counters are set up opposing, i.e. facing, white's
5 counters.

The object of the game is to throw a pair of dice so that in
accordance with the rules of the game of Backgammon, the counters (or
men as they are called) of white and black are moved to their
respective home tables and thence to be borne off the board; the
10 winner being the first person to bear all his counters off the board.

The rules of Backgammon are well known per se and, if required,
further reference may be made to the forenoted publication "Win at
Backgammon", the contents of which are incorporated herein by way of
reference.

15 It will be realised that the game of Backgammon is restricted to
being played by only two players and that a player has to get his
counters through his opponent territory or board to get them to his
home table.

The present invention seeks to provide a board game which may be
20 played by two to four inclusive players.

According to the broadest aspect of this invention there is
provided a board game for two or more players including a support
means marked with a playing area, the playing area being divided by
bars to thereby form four or an even number of more home areas each
25 separated one from another by a bar, each home area being divided into
a plurality of marked positions of alternating colours so that no two
adjacent marked positions are the same colour, one colour being the
same in all home areas with the other colour being a different hue in
each home area, a set of counters for each said another colour and
30 having a like colour therewith, each set of counters having a
plurality of counters, one set of counters being provided for each
player, and a pair of dice, whereby in playing the game, a player is
allocated a particular one of said another colour and the counters are
initially disposed about the support means in like fashion for each
35 player, the players take turns in throwing the dice and in dependence
thereof move the counters allocated thereto into the home area marked
with a colour allocated to said player, and a player subsequently

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bears off the counters allocated thereto from the support means, the first player to bear his allocated counters from the support means being the winner.

According to another aspect of this invention there is provided a
5 board game for two to four inclusive players including a support means marked with a circular playing area, the playing area being diametrically divided by two orthogonal bars to thereby form quadrants, each quadrant being divided into nine segments of alternating colour so that no two adjacent segments are the same
10 colour, one colour being the same in all quadrants with the other colour being a different hue in each quadrant, a set of counters for each said another colour and having a like colour therewith, each set of counters having a like plurality of counters, one set of counters being provided for each player, and a pair of dice, whereby in playing
15 the game, a player is allocated a particular one of said another colours and the counters are initially disposed about the support means in like fashion for each player, the players take turns throwing the dice and in dependence thereon move the counters allocated thereto into the quadrant marked with the colour allocated to said player, and
20 a player subsequently bears off the counters allocated thereto from the support means, the first player to bear his allocated counters from the support means being the winner.

The manner in which the counters are moved are generally similar to that of Backgammon, known per se, although there are some
25 differences in the rules as noted hereinafter.

Preferably the colour in the segments is provided in the area of an isosceles triangle having the base thereof touching the radices of the segments where they intersect the circumference of the playing area, and in a preferred embodiment, the apex of the triangle is
30 positioned at substantially two third of the radius of the segment.

Preferably the adjacent players move the counters thereof in opposing directions. Thus, the direction of moving counters from alternate quadrants is the same, i.e. clockwise or anticlockwise. Advantageously, the segments of each quadrant are numbered in
35 descending order in the direction of play for that quadrant with the remaining segments on the support means taking corresponding virtual numbers (the term virtual number being herein defined).

Advantageously, fifteen counters form each set of counters, although when played by four players, preferably eleven counters are initially utilised by each player. Preferably when four players are involved in the game, each player is allocated a predetermined another
5 colour and the counters of that another colour are arranged for each players as follows:

3 counters on segment No. 9 of the colour allocated the player, (i.e. the outer or highest numbered segment of the players allocated colour segment);

- 10 3 counters on virtual numbered segment 15;
 3 counters on virtual numbered segment 25;
 2 counters on virtual numbered segment 36.

However, the game may be played with thirteen or fifteen counters per player, by adding one or two counters, as required, to segment
15 numbered 9 or virtual numbered segment 25 respectively. When only two players are involved, fifteen counters are used per player and initially arranged as forenoted.

Conveniently, the support means is a board or cloth and with advantage, a pair of dice are supplied for each player. Advanta-
20 geously the dice have the same colour as the counters allocated a player.

The game according to the invention is played in accordance with the rules hereinafter defined.

The invention will now be described by way of example, with
25 reference to the accompanying Figures in which:

Figure 1 shows a plan view of the game board with the counters arranged for the commencement of the game; and

Figures 2, 3, 4, 5 and 6 show partial plan view of the board for assistance interpreting the rules for the game.

30 The board 1 shown in Figure 1 has a circular playing area 2 with the playing area being divided by orthogonally disposed bars 3, 4 to thereby divide the playing area into quadrants designated as home board in A, B, C and D respectively. Each of the quadrants is divided into nine segments with each of the segments being marked with a
35 respective isosceles triangle A1-A9, B1-B9, C1-C9 and D1-D9 respectively. Each triangle has its base touching the radices of the segments where they intersect the circumference of the playing area

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and the height of the apex of each of the triangles is positioned at approximately two thirds the radius of the segments. It will be noted that the triangles or points as they are called are numbered in alternate directions, such that the points of quadrant A are

5 referenced A1-A9 in a clockwise direction and similarly quadrant C points are referenced C1-C9, whereas the points of quadrants B and D are referenced B1-B9 and D1-D9 respectively in an anticlockwise direction. The purpose for this is that players from adjacent quadrants traverse the board in opposing directions.

10 Each of the points around the board is a different colour from an adjacent point. The points are arranged to be alternately different colours around the playing area, but with one of the colours (preferably white) being the same in all quadrants, so that, for example, A8, A6, A4, A2, B1, B3, B5 etc are white, whereas the
15 remaining points in a quadrant are a different colour and the different colour in each quadrant is different from that of any other quadrant. Thus points A9, A7, A5, A3, A1 are red in colour, whereas points B2, B4, B6, B8 are black in colour, points C9, C7, C5, C3, C1 are yellow in colour and points D2, D4, D6 and D8 are blue in colour.

20 A player is allocated a particular home board colour, i.e. red, black, yellow or blue and assigned up to fifteen counters or men of the same colour as the colour of his home board. Thus, the player assigned home board A which is red, will have red counters, and so on.

With four players, the counters are arranged as shown in Figure

25 1. The men for a player using home board A are set out as follows:

3 men on A9;

3 men on virtual numbered point 15, i.e. D4;

3 men on virtual numbered point 25, i.e. C7; and

2 men on virtual numbered point 36; i.e. B1.

30 Thus, the men for the player using home board A are disposed counting in a clockwise direction from point A1. A similar procedure is adopted for a player using home board C, but for players home boards B and D an anticlockwise count from their point 1 is effected.

It has been found best for three and four handed versions of the
35 game to be played with eleven men per player. However, the game may be played with thirteen or fifteen men per player, in which case one or two men respectively are added to points 9 and 25 for each player.

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For a two handed version of the game, fifteen men per player should be used and the game may be played to Backgammon rules.

For each player there is provided a pair of dice AD, BD, CD and DD for home boards A-D respectively, and the dice are arranged to be
5 the same colour as the distinguishing colour of each quadrant and the counters assigned to each player.

A doubling cube 10 is provided similarly to the cube used in Backgammon and the cube has sides marked 2, 4, 8, 16, 32, 64 respectively and the players decide at the outset of the game whether
10 the cube 10 is to be employed. The function of the doubling cube 10 will be described later herein.

Similarly to Backgammon, the following glossary of terms apply:

A bar

The lines 3, 4, between each of the home boards upon which men
15 put out of play are placed during the game to await re-entry into the game.

Bearing Off

The action of removing a player's men (counters) from his home board in order to complete the game.

20 Hit

The action of removing an opponent's man with a player's man when that opponent's man is on its own on a vacant point.

Owned Point

A point occupied by two or more men of any one player.

25 Vacant Point

An unoccupied point or occupied by only one man.

Similar to Backgammon, the object of the game in order to claim victory is for a player to have moved all of his men into his own home board and have borne them off before his opponent or opponents has
30 borne all of his men off the board.

To start the game, the players must decide the number of men to be set up on the board and each of them rolls a die with the highest roll starting play. If there are four players, then the order of play continues in a clockwise direction of players with the players rolling
35 both their allocated dice. If only three players are playing the game, then one player will advance in the opposite direction to the other two players. Thus, in a game for players using home boards A,

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B and C, player B will advance in the opposite direction to players A and C. In such an instance where there are three players, the following rules apply:

1. The players roll a die for the choice of home and the highest roll takes first choice and so on. The single player in the odd home board i.e. the direction of travel, shall commence play and shall have the first option to double the game when using the doubling cube (to be described later herein).

2. During a series of games the player shall play on the odd home board only once in a series of three games, unless otherwise arranged. The fourth set of men shall remain off the board.

When the game is to be played by two players, the player shall set up their men on home boards going in opposite directions only. Thus it is proposed that the player having home board A shall not play the player having home board C and the player having board B shall not play the player having home board D. The men will be set up as shown in Figure 1 for the two home boards only, with the other sets of men remaining off the board. As in the Backgammon, the game is to be played with fifteen men per player with the arrangement being as previously described. With only two players, the game may be played in accordance with the rules of Backgammon.

In play of the present game, each player rolls his dice to determine the moves of the men on the board. Because the rules of the present game are generally similar to Backgammon, they will not be described herein in detail and reference is incorporated herein to the forenoted publication "Win at Backgammon".

However, the following summary of the rules of the present game will be given.

Players A and C move their men in an anticlockwise direction and players B and D move their men in a clockwise direction.

A player may move one man the distance to correspond to the total number shown by both dice he has thrown, or he may move two men, one the distance corresponding to the number shown on one die and the other, by the distance corresponding to the number shown on the other die.

When a man is moved, the number shown by both dice, it may not be moved to any owned point of an opponent, although it may touch such an

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owned point in the course of its travel. In this respect, reference should be made to Figure 2 in which player D has thrown his dice DD and rolled a 5 and a 1. Player D decides to move his counter DC on point D9 in Figure 2, 5 points and a further 1 point, and in moving
5 counter DC 5 points he touches upon point D4 which is owned by player A having three counters AC thereupon. However, unlike Backgammon, such a "touch" is permitted. Thus, although a man may not be moved to reside on any owned point, it may touch an owned point on its travel to a vacant point or a point owned by the player making the move.

10 When a player is able to move only one of the numbers shown on the dice, he must move one man the higher number. However, if all moves are blocked, he must move one man the lower number.

Players must move their men, the number shown by the dice unless all possible moves are blocked, in which case the player forfeits his
15 roll. When a double number or doublet is rolled a player must move twice the number shown; the move may be in any combination of up to four men, e.g. suppose a player has rolled two two's on his dice, then he may move one man eight points, two men four points, four men two points, or one man six points and one man two points. If having
20 rolled a doublet and a player finds his men are blocked at any stage, he must move his men the highest possible total of the roll.

At the start of the game, all player's own a point in each of the four home boards. A point is owned when a player has two or more men on a particular point and a point may be owned by only one player. A
25 man moved to a vacant point and left on its own may be hit and removed from play by another player. It is part of the strategy of the game to hit an opponent's man at a player's convenience. Referring to Figure 3, player A has rolled his dice AD 3 and 1 and decides to play his moves so that he can hit player B's counter BC on point A8 by
30 playing the 1 first from point A9. Thus, one of a player A's counters AC on point A9 is moved as shown by the solid arrow headed line from A9 to A8 thereby causing counter BC on A8 to be removed to the bar 4 as shown by the broken arrow headed line, and thence to progress for the three rolled by the other die to point A5 which was
35 already owned by player A having two men thereon.

When a player has a man hit and it is placed on the bar 4, the player is not allowed to move any of his other men until his man or

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men on the bar are re-entered onto the board at the furthest home board from his own. Thus for player A, he must enter his men at home board B, player B must re-enter his men at home board A, player C must re-enter his men at home board D and player D must re-enter his men at home board C. A man may be re-entered on a vacant point, i.e. an unoccupied point or occupied by only one man of an opponent or a point owned by the player attempting to re-enter a man. The number rolled by the dice must correspond either individually or in combination with the point number of the re-entry home board upon which the man may be positioned i.e. a vacant point as defined herein or a point owned by the player attempting to re-enter. Thus, referring to Figure 4, player D has rolled his dice DD 6 and 1. Because point C6 is owned by player B's counter's BC, the number 6 rolled on one of the dice may not be used by player D having his counter DC on the bar 4, but the total rolled, i.e. 7, may be used as shown by the solid arrow headed line. However, counter DC on the bar 4 may also be moved to point C1 as determined by the roll number indicated by one of the dice. Such a move is indicated by broken arrow headed lines and is permitted since point C1 is occupied by only one counter AC which is owned by player A. Player D may therefore hit the counter AC at point C1 thereby sending man AC to the bar.

Play continues in this manner until a player has brought all his men into his own home board, whereupon he begins "bearing off". This a player may do by exact rolls of a dice. Referring now to Figure 5, player C who has rolled his dice CD 5 and 3 may bear off one man the total number thrown, i.e. 8, from point C8 as shown by broken arrow headed lines or one man each from point C5 and C3 as shown by the solid arrow headed lines. When a player is unable to use his roll to bear off, because he has no men on the points corresponding with the numbers rolled, he may move his men toward position 1 of his home board in accordance with the number rolled. In the alternative, if the player rolls a higher number than he requires, he must bear his men off from the nearest highest point. If any man is left on a vacant point when bearing off, it may be hit by an opponent.

Referring to Figure 6, player A has rolled his dice AD two sixes so that he has a total of twenty four points which may be used by any combination of four men. Player A decides to move two men from point

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A5 and two men from A4 as shown by the solid arrow headed lines (it being remembered a maximum of four men may be moved at any one time), but this then leaves him with a vacant point A4, which having only a single counter AC thereon, is liable to be hit. If the man AC
 5 on position A4 is hit, it must be re-entered at the furthest home board from his own, i.e. in the present example at home board B and then worked round the board back to home board A before the player A may bear off any further men.

The game is won by the first player to bear off the board all his
 10 men.

The nature of the player's win is scored as follows:

A single game win, worth 1 point:

The single game is won from any opponent who has borne off at least 1 man. Any player who has borne off any men can only loose a
 15 single game.

A double win game, worth 2 points:

A double game is won from any opponent who has not borne off any man but has none on the third or fourth board away from his home board.

20 A treble game win, worth 3 points:

A treble game is won from any opponent who still has men on the third and/or fourth board away from his home board.

A "QUATRO" game win, worth 4 points:

A "QUATRO" game is won from any opponent who has a man or men on
 25 the fourth board away from his home board. In a game with three or four players, the player may win a "QUATRO" or treble, or double, or single game from any or all opponents.

When the doubling cube 10 is used, the points scored per player will multiply accordingly. The use of the doubling cube is optional
 30 and must be decided before the start of play. Assuming it is being decided to employ the doubling cube 10, then at the start of play the doubling cube is placed at the centre of the board showing the 64 number uppermost. The doubling cube becomes operational when a player decides to double up the value of the game. The player shall wait for
 35 his turn to roll the dice before deciding to double the game. He shall then place the doubling cube on the top corner on his home board showing the number 2 uppermost and announcing his intention. Once the

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doubling cube is offered, players will accept or decline in clockwise direction around the board. Players who decline the offer shall withdraw their men from the board and loose the game to the player who doubled the game. The game is considered doubled when at least one
5 opponent accepts the doubling cube from then on, the single game win will be worth 2 points, the double game worth 4 points, etc. Play resumes with the doubling player rolling his dice in the normal fashion. Any player may double up the game again to 4, 8, 16, 32 or 64 at any time according to the above rules, but a player may not double
10 the game up twice in succession at any time.

It is possible to play the above described game as a team game in which instance, players A and C will form a team and play a team formed by players B and D.

Having thus described the operation of the game, it will be
15 realised that in the present game, it may be played by two, three or four players and that when four players are playing the game, any one player has to get his men through three opponent's territories to get them home, while seeing his opponent's men go through his home board to get home.

20 The following above mentioned rules are different from the rules of Backgammon:

1. A player may "touch" an establish point when moving onto a vacant point.

2. A player may re-enter the board with the point shown on
25 either dice or any combination of both dice. Re-entering takes place from the home board furthest from the player's own home board.

3. When the doubling cube is in use, a player offers the doubling cube to his opponent or opponents by placing it at the top of his home board and players may accept or reject in clockwise order.
30 Players not accepting the "double" withdraw from the game and remove their men from the board.

CLAIMS:

1. A board game for two or more players including a support means marked with a playing area, characterised by the playing area being
5 divided by bars 3, 4 to thereby form four or an even number of more home areas (A, B, C, D) each separated one from another by a bar, each home area being divided into a plurality of marked positions (A1-A9, B1-B9, C1-C9, D1-D9) of alternating colours so that no two adjacent marked positions are the same colour, one colour being the same in all
10 home areas with the other colour being a different hue in each home area, a set of counters (AC, BC, CC, DC) for each said another colour and having a like colour therewith, each set of counters having a plurality of counters, one set of counters being provided for each player, and a pair of dice (AD, BD, CD, DD), whereby in playing the
15 game, a player is allocated a particular one of said another colour and the counters are initially disposed about the support means in like fashion for each player, the players take turns in throwing the dice and in dependence thereon move the counters allocated thereto into the home area marked with a colour allocated to said player, and
20 a player subsequently bears off the counters allocated thereto from the support means, the first player to bear his allocated counters from the support means being the winner.

2. A board game for two to four inclusive players including a
25 support means characterised in that the support means (1) is marked with a circular playing area, the playing area being diametrically divided by two orthogonal bars (3, 4) to thereby form quadrants (A, B, C, D), each quadrant being divided into nine segments (A1-A9, B1-B9, C1-C9, D1-D9) of alternating colour so that no two adjacent segments
30 are the same colour, one colour being the same in all quadrants with the other colour being a different hue in each quadrant, a set of counters (AC, BC, CC, DC) for each said another colour and having a like colour therewith, each set of counters having a like plurality of counters, one set of counters being provided for each player, and a
35 pair of dice (AD, BD, CD, DD), whereby in playing the game, a player is allocated a particular one of said another colours and the counters are initially disposed about the support means in like fashion for

each player, the players take turns throwing the dice and in dependence thereon move the counters allocated thereto into the quadrant marked with the colour allocated to said player, and a player subsequently bears off the counters allocated thereto from the support
5 means, the first player to bear his allocated counters from the support means being the winner.

3. A game as claimed in Claim 2, characterised in that the colour in the segments is provided in the area of an isosceles triangle having
10 the base thereof touching the radices of the segments where they intersect the circumference of the playing area.

4. A game as claimed in Claim 3, characterised in that the apex of the triangle is positioned at substantially two thirds of the radius
15 of the segment.

5. A game as claimed in any preceding claim, characterised in that the adjacent players move the counters thereof in opposing directions.
20

6. A game as claimed in any of claims 2 to 5 characterised in that the segments of each quadrant are numbered in descending order in the direction of play for that quadrant with the remaining segments on the support means taking corresponding virtual numbers.
25

7. A game as claimed in any preceding claim, characterised in that fifteen counters form each set of counters.

8. A game as claimed in any preceding claim, characterised in that
30 when four players are involved in the game, eleven counters are initially utilised by each player.

9. A game as claimed in Claim 8, characterised in that each player is allocated a predetermined another colour and the counters of that
35 another colour are arranged for each players as follows:

3 counters on segment No. 9 of the colour allocated the player,
3 counters on virtual numbered segment 15 for the colour

allocated the player;

3 counters on virtual numbered segment 25 for the colour
allocated the player;

2 counters on virtual numbered segment 36 for the colour
5 allocated the player.

10. A game as claimed in any of Claims 2 to 7, characterised in that
the game may be played with thirteen or fifteen counters per player,
by adding one or two counters, as required, to segment numbered 9 or
10 virtual numbered segment 25 respectively.

11. A game as claimed in Claim 10, characterised in that when only
two players are involved, fifteen counters are used per player.

15 12. A game as claimed in any preceding claim, characterised in that
the support means is a board or cloth.

13. A game as claimed in any preceding claim, characterised in that a
pair of dice are supplied for each player.
20

14. A game as claimed in Claim 13, characterised in that the dice
have the same colour as the counters allocated a player.

15. A game as played in any preceding claim, played in accordance
25 with the rules defined hereinbefore.



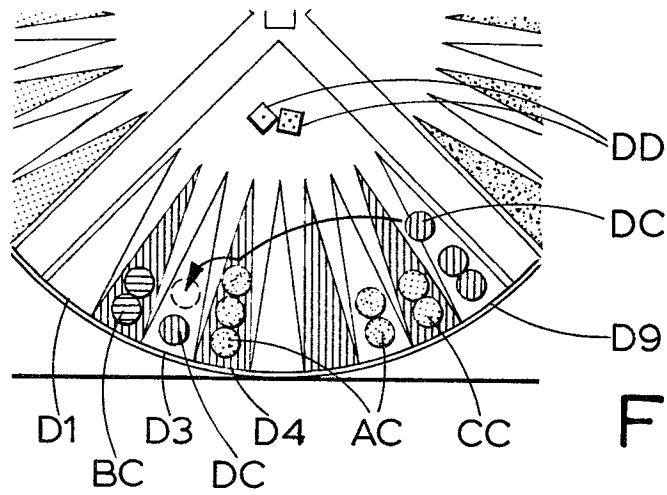


Fig. 2

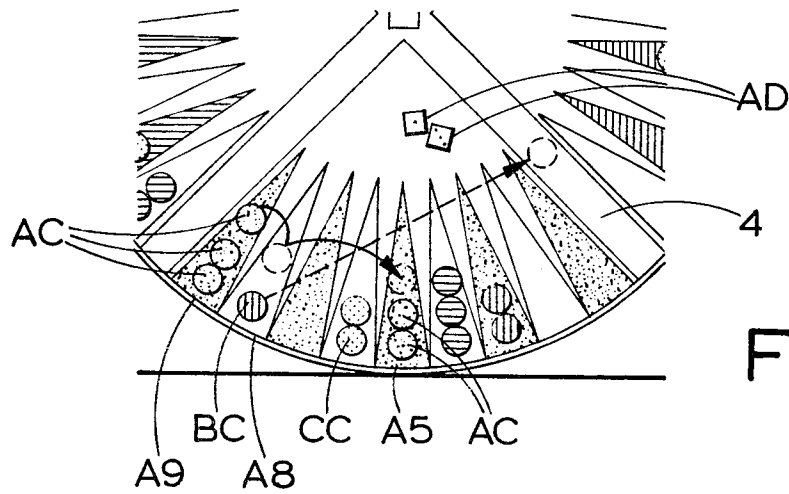


Fig. 3

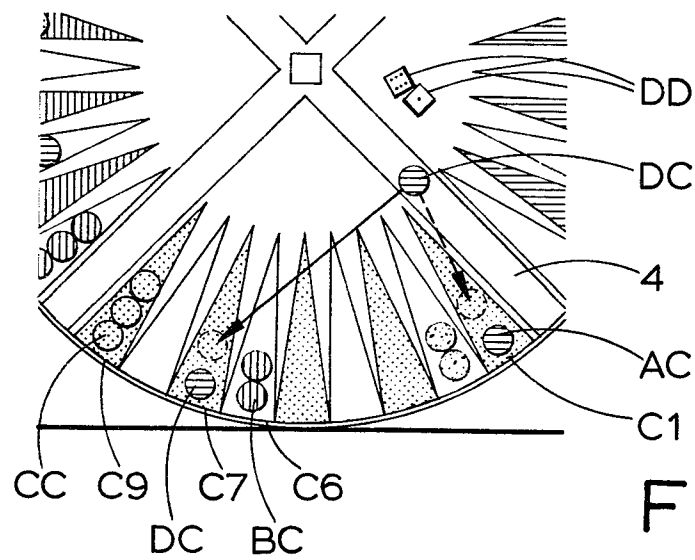


Fig. 4

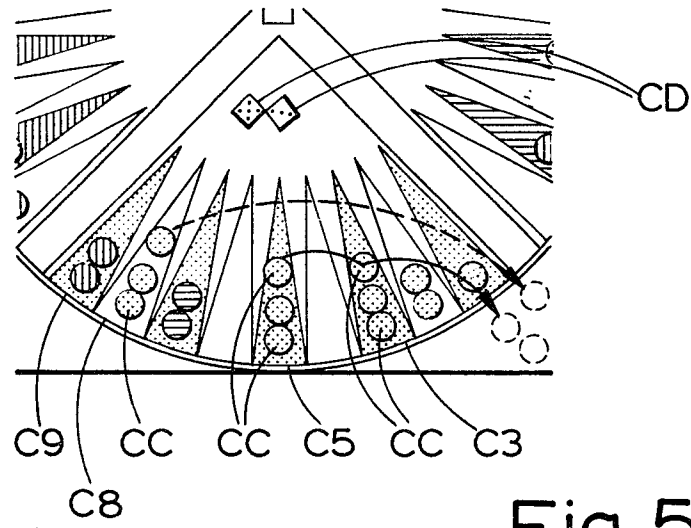


Fig. 5

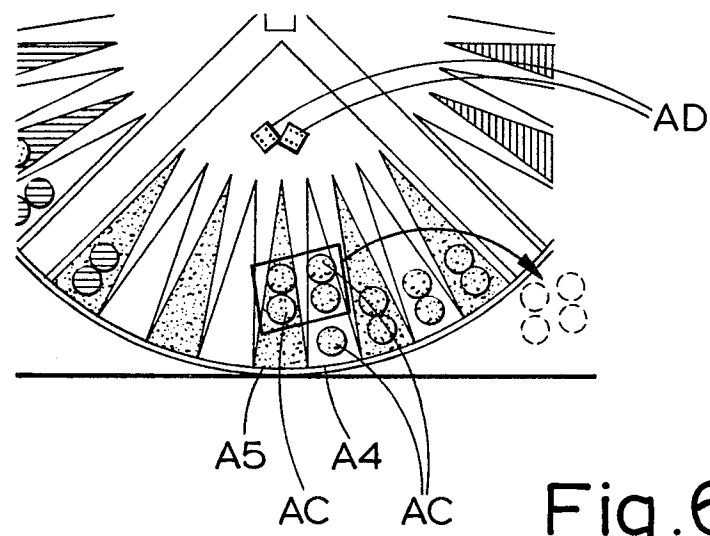


Fig. 6



European Patent
Office

EUROPEAN SEARCH REPORT

0090529

Application number

EP 83 30 1308

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Y	GB-A-1 586 176 (A.L. GRAY TAYLOR) * Whole document *	1-3,5- 7,12- 14	A 63 F 3/00
A		11	
Y	FR-A- 602 963 (A.J. FRANCOIS) * Page 1, lines 1-12; page 2, lines 16-68; Figures 4, 5, 6 *	1-3,5- 7,12- 14	
A		11	
Y	FR-A- 401 042 (E. CANIVE) * Page 1, lines 26-40; figures 1, 2 *	1-3,5- 7,12- 14	TECHNICAL FIELDS SEARCHED (Int. Cl. ³) A 63 F 3/00
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Y	US-A-4 286 787 (H.L. BARBER) * Column 2, lines 50-52 *	1-3,5- 7,12- 14	
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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 06-06-1983	Examiner CLOT P.F.J.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Y	US-A-4 058 319 (R.M. THOMAS et al.) * Column 3, line 40; column 5, lines 53-56; column 7, line 3 *	1-3, 5-7, 12-14	
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Y	FR-A- 474 319 (H. QUEILLE) * Page 2, lines 28-32 *	1-3, 5-7, 12-14	
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A	FR-A- 722 494 (ETS. C. MICHEL) * Whole document *	1, 2	
A	GB-A-2 028 668 (YOUNGCRAFT PTY, LTD.) * Abstract; page 1, lines 14-22 *	11	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 06-06-1983	Examiner CLOT P.F.J.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			