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(54) **Game of skill**

(57) A game of skill comprising a betting table and a playing apparatus, the betting table being provided with a print with symbols on which chips, coins or like objects of value can be betted, the playing apparatus comprising a ball input tray having a concave surface which is rotational-symmetrical around a center with an opening at the location of the center of the surface, which opening opens into a passage which extends below the concave surface and terminates, via an outlet, into a circumferential area extending around the ball input tray, a circle of symbols subdivided into sections being located in the circumferential area, while at each section there is provided a symbol corresponding to a symbol on the betting table, the circle of symbols being rotatable relative to the passage.

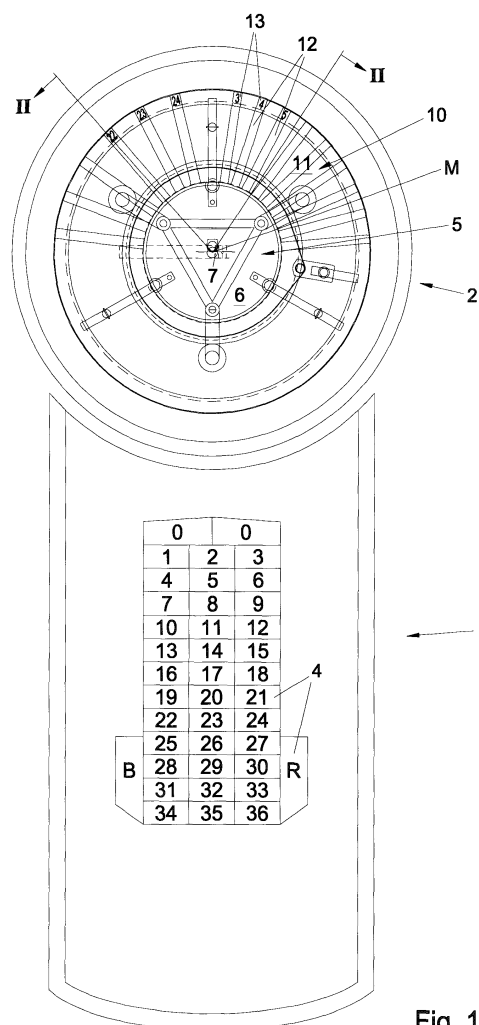


Fig. 1

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Description

[0001] The invention relates to a game of skill of an entirely new type. The closest prior art is formed by the generally known game of roulette. Such game of roulette comprises a betting table bearing a print with symbols on which betting can take place by means of chips, coins or like objects of value. Further, the known game of roulette comprises a playing apparatus provided with a ball input tray, in which ball input tray there is also arranged a circle of symbols which is rotatably supported. When the game is played, a croupier throws a ball into the ball input tray and gives the circle of symbols a push, causing it to rotate. After some time, the ball hits the circle of symbols or other uneven parts provided in the input tray, so that the regular path of the ball in the ball input tray is disturbed and the position in which the ball eventually ends up on the circle of symbols is unpredictable. Hence, the known game of roulette is a game of chance, where the player's skill does not play a part whatsoever.

[0002] The object of the invention is not to provide a game of chance, but a game of skill, in which the player, if he or she has the required skill, can increase his or her chance of winning.

[0003] To this end, according to the invention, the game of skill comprises a betting table and a playing apparatus, the betting table having a print with symbols on which chips, coins or like objects of value can be betted, the playing apparatus being provided with a ball input tray having a concave surface which is rotational-symmetrical around a center with an opening at the location of the center of the surface, which opening opens into a passage extending below the concave surface and terminating into a circumferential area extending around or below the ball input tray, a circle of symbols that is subdivided into sections being located in the circumferential area, while at each section there is provided a symbol corresponding to a symbol on the betting table, the circle of symbols being rotatable relative to the passage.

[0004] As the path of the ball in the ball input tray is in each case substantially identical, the player who bets his chips on the betting table can predict, depending on the position of the ball at a given moment in the ball input tray together with the position of the circle of symbols at the same moment, which symbol is situated before the outlet of the passage at the moment when the ball rolls out of this passage and lands on the circle of symbols, and hence in which section the ball will eventually end up. Due to this predictability, the player, during betting of his chips, can increase his chance of winning. Preferably, the ball input tray will have its outer circumferential edge provided with a vertical wall part, preventing a ball thrown into the ball input tray from rolling out of the tray. When the ball is thrown into the ball input tray, this ball will first roll along the vertical wall part for some time. After a while, the ball comes loose from the vertical wall

part and rolls slowly across the preferably frustoconical surface of the ball input tray towards the opening at the center of the surface. A good moment for determining the position of the rotating circle of symbols or the rotating passage relative to the position of the ball is the moment when the ball releases the vertical wall part. The path then to be traveled by the ball will in each case be substantially identical, so that the time needed for the ball to reach the outlet from that moment onwards is in each case substantially identical, so that the circle of symbols or the passage always makes the same number of rotations, at least when the circle of symbols or the passage rotates at a known speed. In that manner, it is possible to predict in which section on the circle of symbols the ball will eventually end up.

[0005] In accordance with a further elaboration of the invention, it is particularly favorable when the circle of symbols or the passage is driven by a drive motor, with the drive preferably taking place at a constant speed. Accordingly, unlike roulette, the rotary speed of the circle of symbols or the passage cannot be influenced by the croupier. This influences the predictability of the game of skill considerably.

[0006] The invention also relates to a playing apparatus apparently intended for a game of skill according to the invention.

[0007] Further elaborations of the invention are described in the subclaims and will hereinafter be further clarified, with reference to the accompanying drawings.

Fig. 1 is a top plan view of the betting table and the playing apparatus;

Fig. 2 is a sectional view taken on the line II-II in Fig. 1 of the playing apparatus; and

Fig. 3 is another top plan view of the playing apparatus, the ball input tray and the playing circle having been made transparent, so that the parts located therebelow are visible.

[0008] In the top plan view of Fig. 1, the betting table 1 and the playing apparatus 2 are clearly shown. The betting table 1 is provided with a print with symbols 4 on which chips, coins or like objects of value can be betted. The playing apparatus 2 is provided with a ball input tray 5 comprising a concave surface 6 which is rotational-symmetrical around a center M and with an opening 7 at the location of the center M of the surface 6. In the present exemplary embodiment, the concave surface 6 is designed as a frustoconical surface 6 whose truncated side faces down. If so desired, the angle of inclination of the ball input tray adjacent the opening 7 may be slightly steeper than the angle of the ball input tray at the parts of the ball input tray that are situated more radially outwards. Connecting to the upper outer circumferential edge 6a of the frustoconical surface 6 is a vertical wall part 15, preventing a ball thrown into the ball input tray 5 from rolling out of the ball input tray 5. The central opening 7 opens into a passage 8 which extends

below the concave surface 6 and terminates, via an outlet 9, into a circumferential area 10 extending around the ball input tray 5. Located in the circumferential area 10 is a circle of symbols 11, subdivided into sections 12. At each section 12 there is provided a symbol 13, corresponding to a symbol 4 on the betting table 1. The circle of symbols 11 is arranged for rotation in a frame 14. For that purpose, the circle of symbols 11 is supported by means of a bearing assembly comprising a bearing ring 16 which is fixedly connected to the bottom side of the circle of symbols 11. Connected to the frame 14 are a number of first bearing wheels 17 having a vertical axis of rotation 17a, which first bearing wheels 17 engage the bearing ring 16 for stabilization of the circle of symbols 11 in horizontal direction. The bearing assembly also comprises a number of second bearing wheels 18, each having a horizontal bearing axis 18a. The center lines of the respective horizontal bearing axes 18a intersect an imaginary vertical line extending through the center M of the circle of symbols 11. The second bearing wheels 18 engage a bottom side of the circle of symbols for stabilization of the circle of symbols 11 in vertical direction.

[0009] Further, in the present exemplary embodiment, the playing apparatus 2 is provided with a drive motor 19 mounted on the frame 14, for rotatably driving the circle of symbols 11. Preferably, the circle of symbols 11 is driven at a constant speed. The drive motor 19 comprises a drive pulley 20 engaging a drive belt 21, which drive belt 21 engages an outer circumference of the bearing ring 16, which bearing ring 16 is engaged, on an inner circumference thereof, by the first bearing wheels 17.

[0010] The frame 14 further comprises setting means 22 for accurately setting the circle of symbols 11 together with the ball input tray 5 in horizontal position. In the present exemplary embodiment, the frame 14 comprises three legs 14a, 14b, 14c, of which at least two legs 14a, 14b are provided with said setting means 22 for setting the length of the relevant legs 14a, 14b, and, accordingly, for accurately setting the circle of symbols 11 together with the ball input tray 5 in horizontal position.

[0011] Of course, the symbols 4, 13 can be realized in various manners. In the present exemplary embodiment, the symbols 4, 13 are formed by a number in combination with a color, for instance red or black. In the present exemplary embodiment, the symbols 4 on the betting table 1 are provided in the same manner in which the symbols of a game of roulette known per se are provided on the betting table associated with a game of roulette.

[0012] Preferably, the passage 8 has a downwardly directed course from the central opening 7 to the outlet 9, so that a ball 8 can travel through the passage 8 under the influence of gravity. In the present exemplary embodiment, the ball ending up in the central opening 7 falls on an inclined face 23 and is thus given an impulse in horizontal direction, as a result of which the ball will

travel by itself through the passage 8.

[0013] Optionally, each section 12 of the circle of symbols 11 may be provided with a sensor adapted to detect the presence or absence of a ball, the sensor being connected to a computer, to which computer a display is connected. On such display, the symbols on which the ball has successively fallen can then be displayed.

[0014] It is readily understood that the invention is not limited to the exemplary embodiment described, but that various modifications are possible within the framework of the invention. Instead of disposing the circle of symbols in the frame for rotation, as described in the exemplary embodiment given, it is also possible to arrange the circle of symbols in a fixed position and to arrange the passage so as to be rotatable about a vertical axis extending through the center M. Preferably, the passage is driven at a constant speed. It is observed that the ball input tray may also be rotatably arranged in the frame, if so desired. Further, the playing apparatus could be provided with two or more passages, enabling the ball to end up in different places in the circumferential area. Unlike the exemplary embodiment shown, the betting table may also be disposed around the playing apparatus. The betting table could then be arranged for rotation around the playing apparatus. Instead of a belt drive mechanism, the circle of symbols may be driven via a gear transmission. Instead of being located around the ball input tray, the circle of symbols may also be located in an area below the ball input tray. In that respect, it is preferred that the vertical center line of the circle of symbols intersect the center of the ball input tray.

Claims

1. A game of skill comprising a betting table (1) and a playing apparatus (2), the betting table (1) being provided with a print with symbols (4) on which chips, coins or like objects of value (2) can be betted, the playing apparatus (2) comprising a ball input tray (5) having a concave surface (6) which is rotational-symmetrical around a center (M) with an opening (7) at the location of the center (M) of the surface (6), said opening (7) opening into a passage (8) which extends below the concave surface (6) and terminates, via an outlet (9), into a circumferential area (10) extending around or below the ball input tray (5), a circle of symbols (11) that are subdivided into sections (12) being located in the circumferential area (10), while at each section (12) there is provided a symbol (13) corresponding to a symbol (4) on the betting table (1), the circle of symbols (11) being rotatable relative to the passage (8).
2. A game of skill according to claim 1, characterized in that the rotational-symmetrical, concave surface (6) of the ball input tray (5) is designed as a frusto-conical surface (6) whose truncated side faces

down, while to the upper outer circumferential edge (6a) of the frustoconical surface (6), a vertical wall part (15) connects, preventing a ball thrown into the ball input tray (5) from rolling out of the ball input tray (5).

3. A game of skill according to any one of the preceding claims, characterized in that the circle of symbols (11) is bearing-supported by means of a bearing assembly (16, 17, 18).

4. A game of skill according to claim 3, characterized in that the bearing assembly (16, 17, 18) comprises a bearing ring (16) fixedly connected to the bottom side of the circle of symbols (11), while connected to the frame (14) are a number of first bearing wheels (17) having a vertical axis of rotation (17a), said first bearing wheels (17) engaging the bearing ring (16) for stabilization of the circle of symbols (11) in horizontal direction, the bearing assembly (16, 17, 18) also comprising a number of second bearing wheels (18), each having a horizontal bearing axis (18a), the center line of said horizontal bearing axis (18a) intersecting an imaginary vertical line extending through the center (M) of the circle of symbols (11), the second bearing wheels (18) engaging a bottom side of the circle of symbols (11) for stabilization of the circle of symbols (11) in vertical direction.

5. A game of skill according to any one of the preceding claims, characterized in that the playing apparatus (2) comprises a drive motor (19) mounted on the frame (14) for driving the circle of symbols (11) for rotation.

6. A game of skill according to claims 4 and 5, characterized in that the drive motor (19) comprises a drive pulley (20) engaging a drive belt (21), said drive belt (21) engaging an outer circumference of the bearing ring (16), said bearing ring (16) being engaged, on an inner circumference thereof, by the first bearing wheels (17).

7. A game of skill according to claim 5 or 6, characterized in that the drive motor (19) drives the circle of symbols (11) at a constant speed.

8. A game of skill according to any one of the preceding claims, characterized in that the frame (14) comprises setting means (22) for accurately setting the circle of symbols (11) together with the ball input tray (5) in horizontal position.

9. A game of skill according to claim 8, characterized in that the frame (14) comprises three legs (14a, 14b, 14c), at least two (14a, 14b) of said legs being provided with said setting means (22a, 22b) for set-

ting the length of the relevant legs (14a, 14b) and, accordingly, accurately setting the circle of symbols (11) together with the ball input tray (5) in horizontal position.

10. A game of skill according to any one of the preceding claims, characterized in that the symbols (4, 13) are formed by a number in combination with a color.

11. A game of skill according to claim 5, characterized in that the symbols (4) on the betting table (1) are provided in the manner of the symbols located on a betting table of a game of roulette known per se.

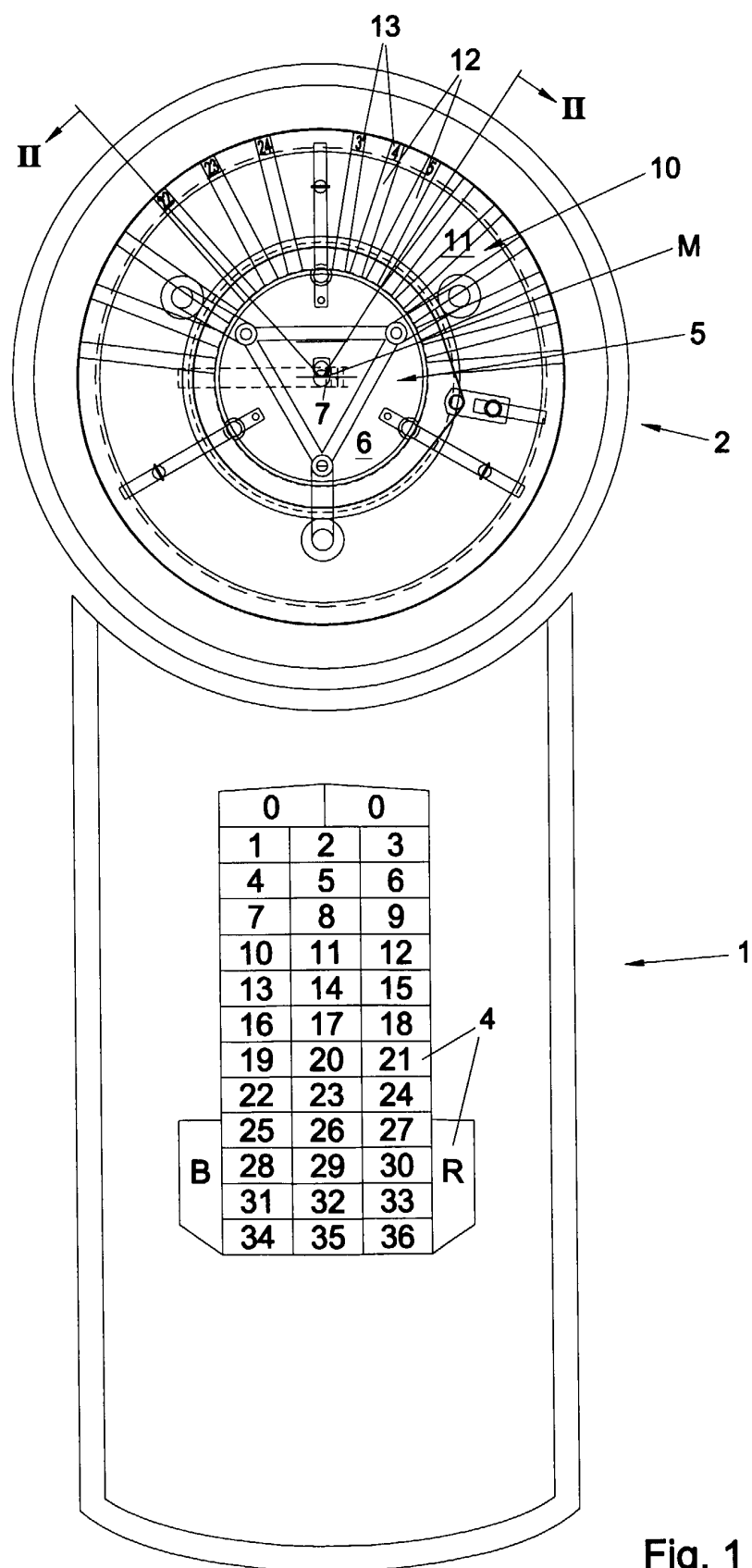
12. A game of skill according to any one of the preceding claims, characterized in that the passage (8) has a downwardly directed course from the central opening (7) to the outlet (9), enabling a ball to travel through the passage (8) under the influence of gravity.

13. A game of skill according to any one of the preceding claims, characterized in that each section (12) of the circle of symbols (11) is provided with a sensor adapted to detect the presence or absence of a ball, the sensor being connected to a computer, to which computer a display is connected on which the symbols on which the ball has successively fallen are displayed.

14. A game of skill according to claim 1, characterized in that the circle of symbols (11) is fixedly arranged in a frame and that the passage (8) is arranged for rotation, so that the outlet (9) of the passage (8) is displaced along the circle of symbols (11).

15. A game of skill according to claim 14, characterized in that the passage (8) is drivable at a constant speed.

16. A playing apparatus (12) apparently intended for a game of skill (1, 2) according to any one of the preceding claims.



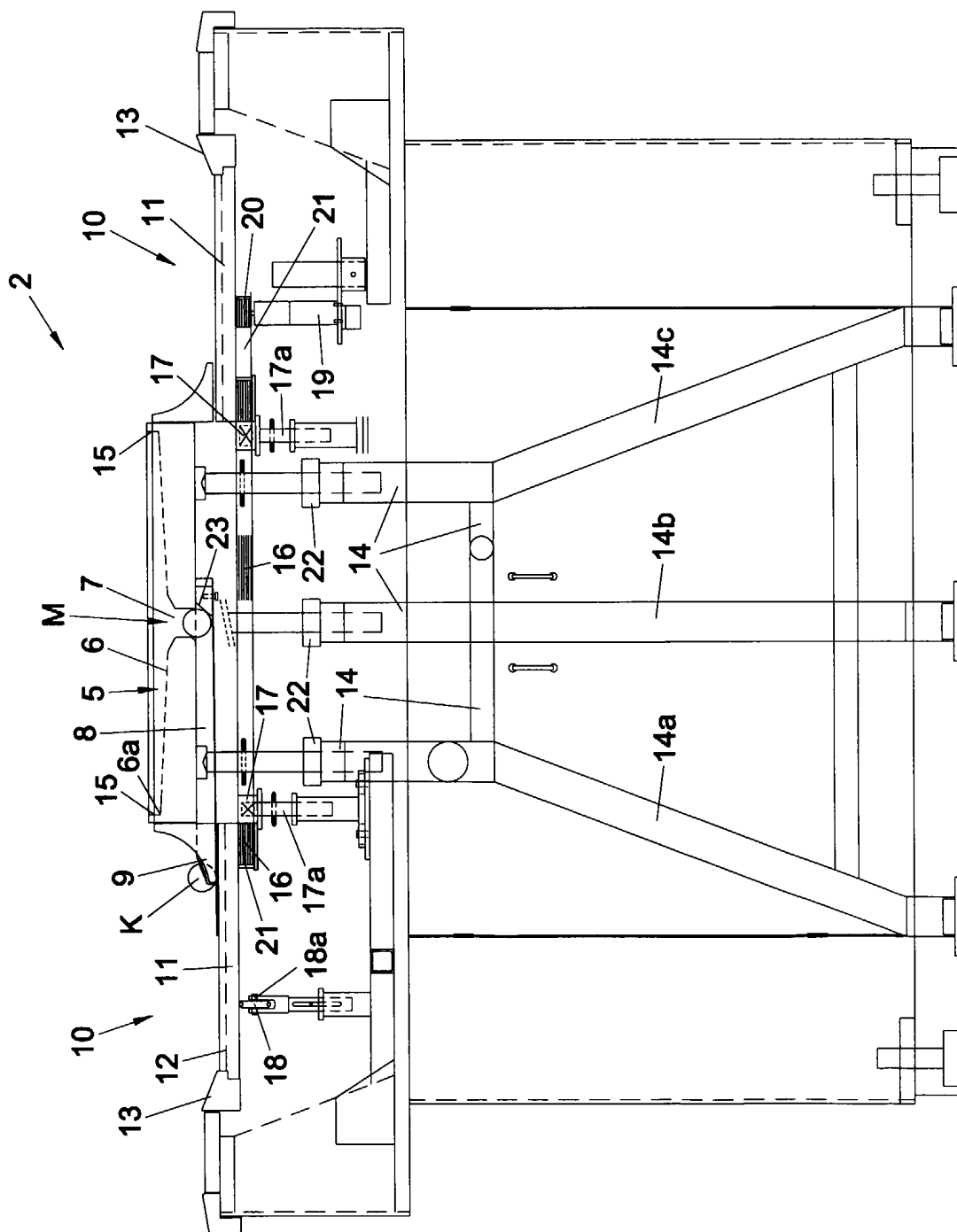


Fig. 2

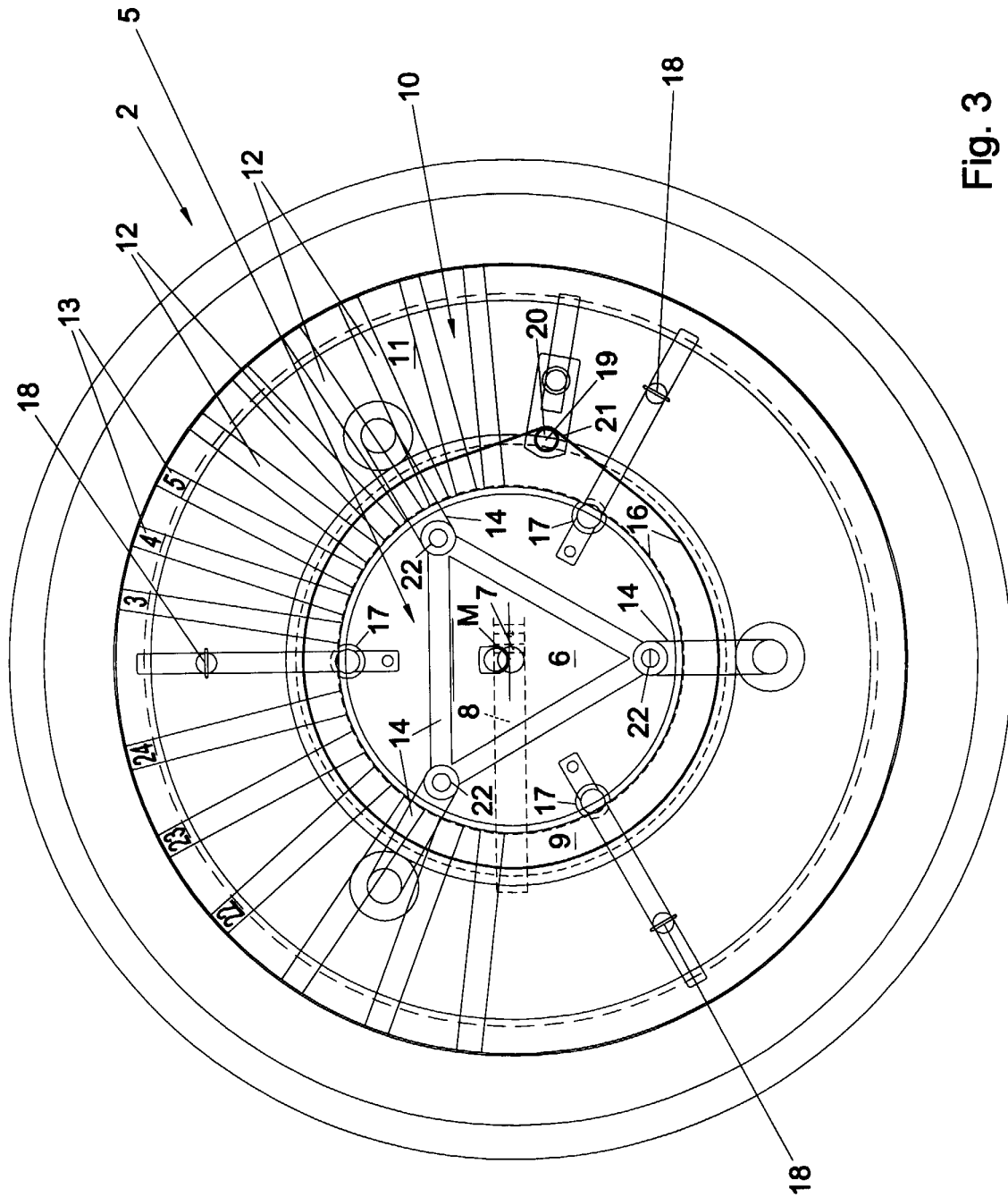


Fig. 3