Nov. 4, 1952 C. M. FRANKS 2,616,699

ROTATABLE WHEEL MARBLE GAME

Filed Feb. 21, 1950 3 Sheets-Sheet 1

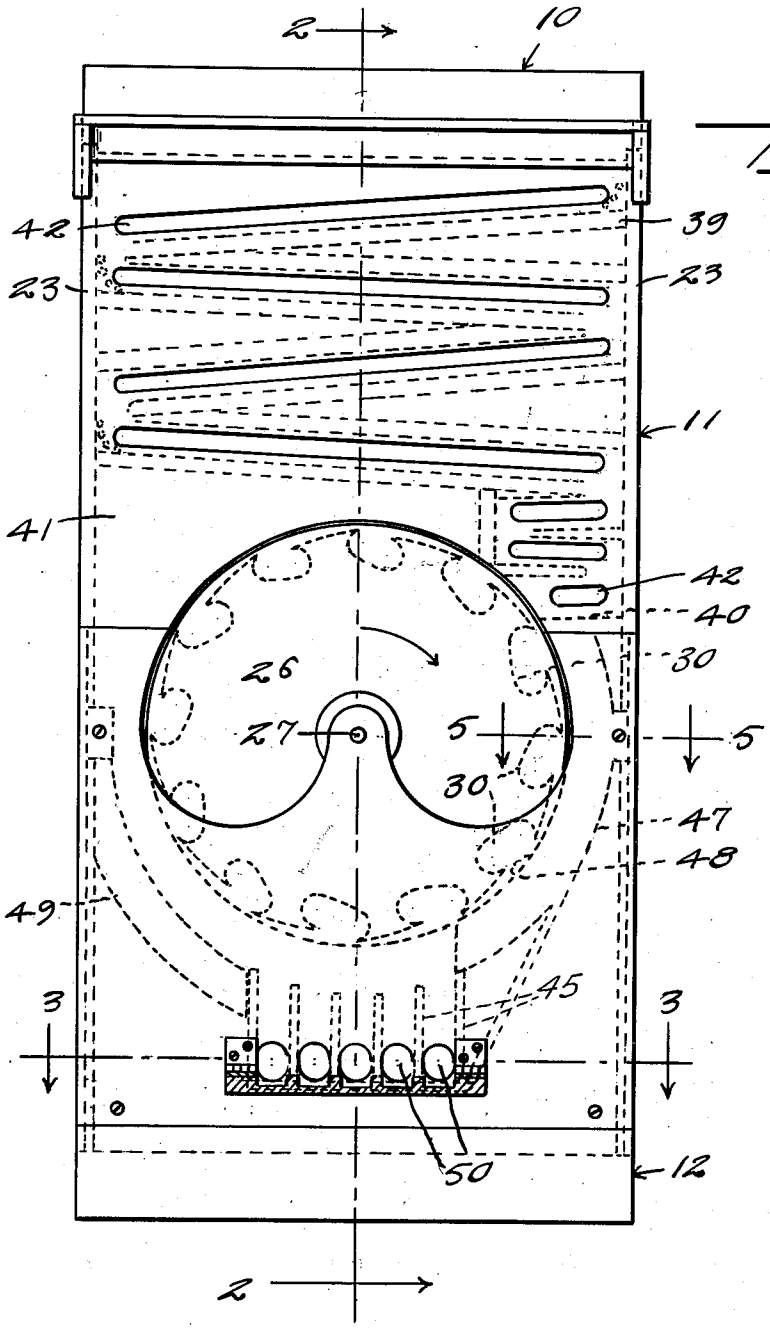


Fig. 1

INVENTOR

C. M. Franks

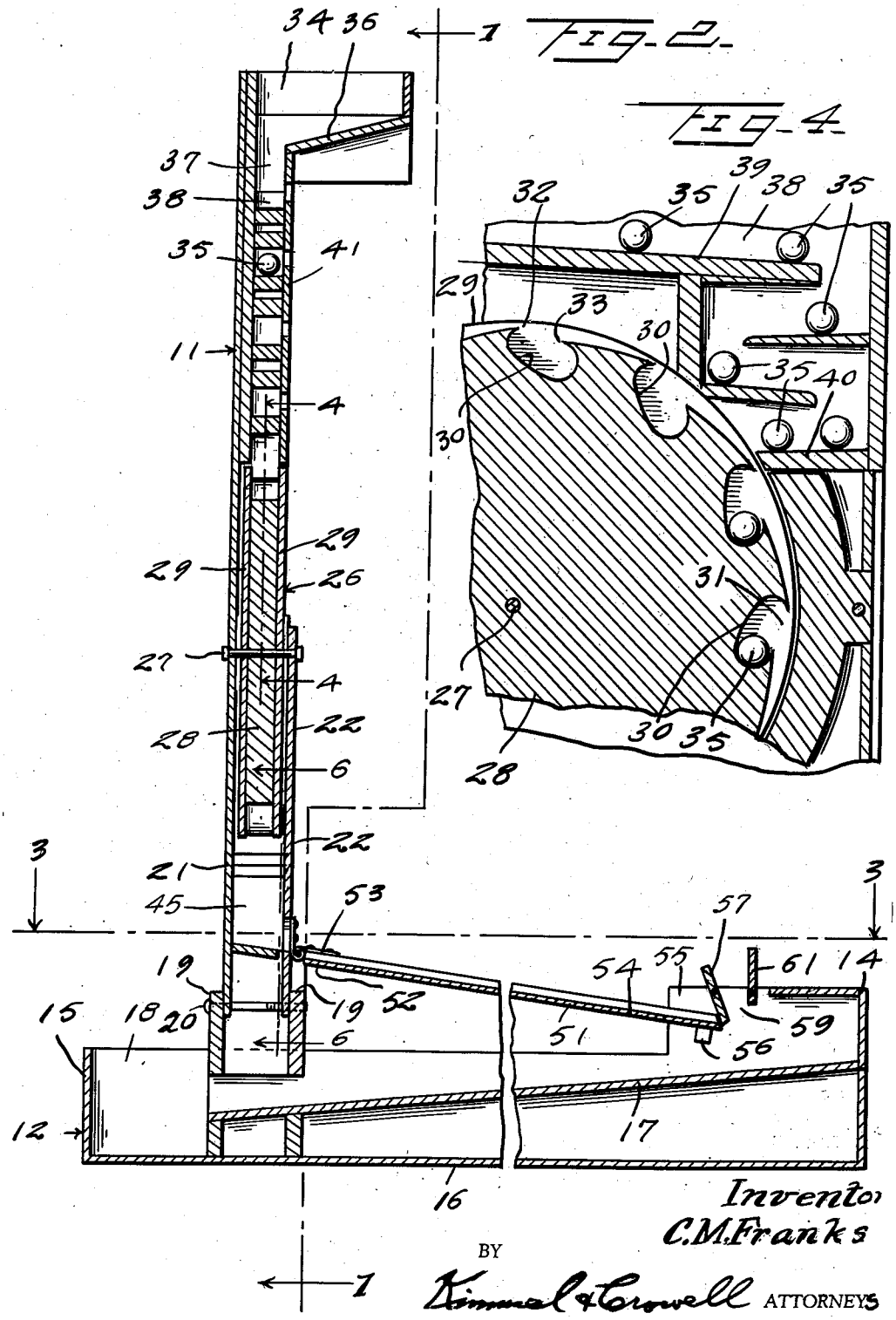
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Inventor
C. M. Franks

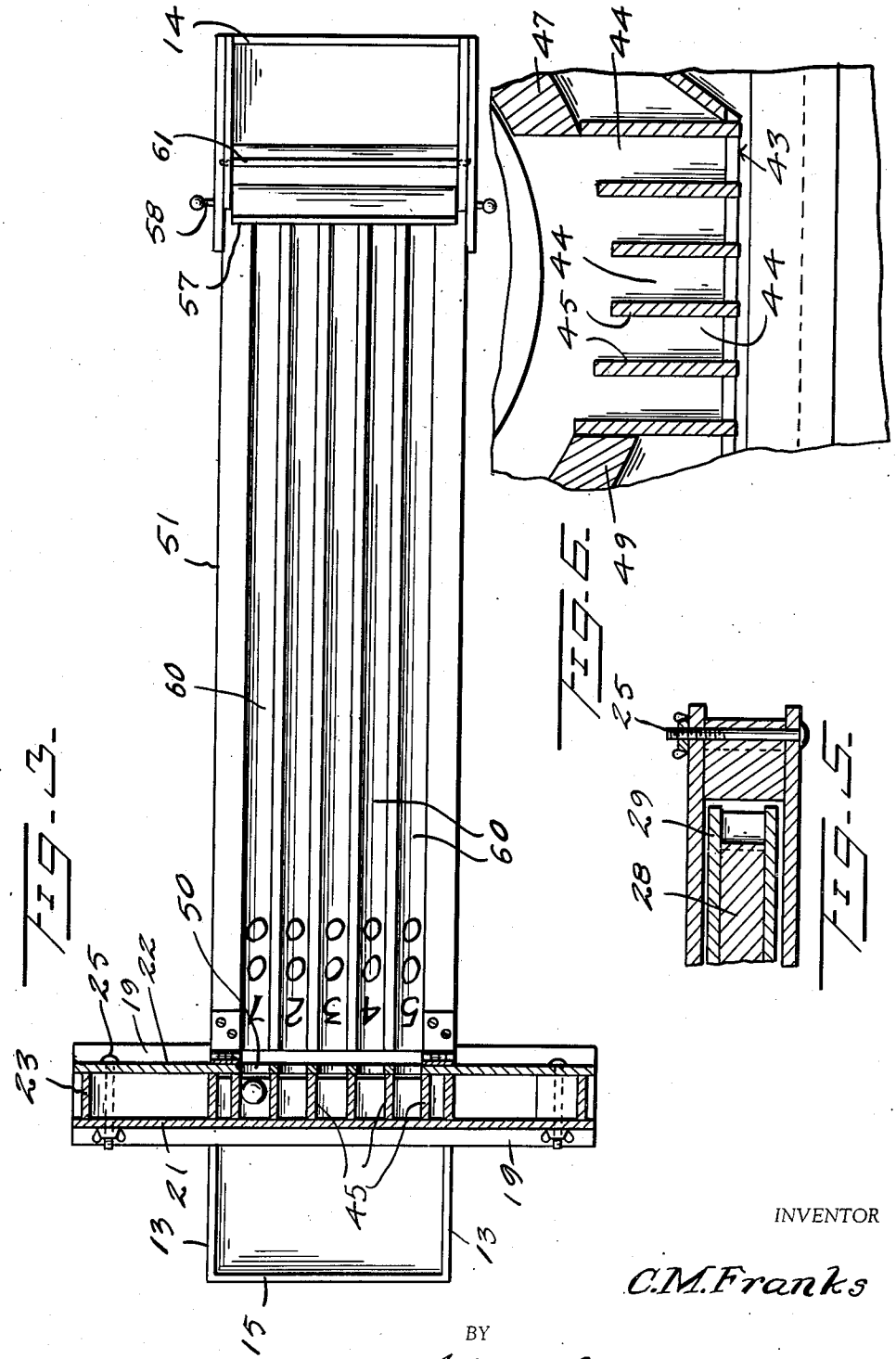
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ROTATABLE WHEEL MARBLE GAME

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INVENTOR

C.M.Franks

BY

Kimmel & Crowell ATTORNEYS

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ROTATABLE WHEEL MARBLE GAME

Charles M. Franks, Fort Lauderdale, Fla.

Application February 21, 1950, Serial No. 145,529

3 Claims. (Cl. 273—120)

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This invention relates to games and more particularly to a novel marble game in which marbles or balls are gravitationally advanced to a rotatable wheel.

A primary object and purpose of the present invention is to provide the structure of a pocketed sphere or ball receiving wheel positioned to receive playing balls from a hopper and deliver the balls into various ball receiving grooves extending away from the wheel on rotation of the wheel by a player of the game.

Another object is to provide a game of skill having a playing wheel the rotation of which may be controlled by the person playing the game.

A still further object of the present invention is to provide a construction which is simple and durable and economical from a utility and manufacturing standpoint.

Other objects and purposes than those stated will appear upon an understanding of the invention had from the following description, taken in connection with the accompanying drawings, in which like numbers refer to like parts in the various views.

In the drawings:

Figure 1 is a front elevation of the game device of this invention showing the downward path for the spheres and the pocketed selecting wheel arranged to revolve above ball receiving grooves.

Figure 2 is a section taken on line 2—2 of Figure 1.

Figure 3 is a plan view and partial section taken on line 3—3 of Figure 1.

Figure 4 is an enlarged partial section taken on line 4—4 of Figure 2.

Figure 5 is an enlarged partial section taken on line 5—5 of Figure 1.

Figure 6 is a fragmentary detail taken on line 6—6 of Figure 2.

Referring now in detail to the drawings the game device of this invention is shown generally at 10. The device 10 is formed with a vertically positioned back or upright structure 11 carried by a horizontal base 12 suitable for mounting on any convenient support of sufficient height to place the device at the right elevation for playing. The form of the base 12 is generally that of an elongated box having side walls 13, a front end wall 14 and a rear wall 15 secured to a flat bottom 16. Spaced above the bottom 16 is a sloping false bottom 17 positioned to provide an inclined plane extending from the front wall 14 toward the rear of the base 12 and terminating in a suitable ball depository portion 18. In this

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manner a suitable arrangement is provided for receiving played balls at the front of the base from whence the balls automatically roll back to the rear of the base to drop into a suitable receiver from which they can either be easily removed by hand or by any suitable mechanical means for further play.

Positioned transversely of the base 12 above the ball depository 18 are a pair of spaced cross members 19 to which is secured the upright structure 11 by suitable securing means such as screws 20 or the like. The upright 11 is comprised of a backboard 21 from which is forwardly spaced a shorter frontboard 22. The two boards 21 and 22 are held apart by spacers 23 formed as vertical strips extending upwardly along the edges of the backboard with the two boards secured together in spaced relationship by a plurality of bolts 25 or like securing means extending therethrough (Figure 3).

Mounted for rotation between the two boards 21 and 22 is a wheel 26 journalled on a shaft 27 carried by the boards and positioned above the inclined plane 17. The wheel 26 is formed with a center section 28 positioned between outer discs 29. Each of the discs 29 is formed to a diameter slightly greater than that of the center section or core 28 of the wheel 26 so as to form a flanged peripheral area in which are formed a plurality of pockets 30 extending inwardly of the wheel between said flanges. Each of the pockets 30 is formed with an entrance passage 31 spaced between a pair of opposed lips. One of the lips 32 is formed as an extended lip being closer to the outer periphery of the flanges 29 and the other lip is formed as a retracted lip 33 being spaced a greater distance from the outer periphery of the flanges 29 so that the outer lip 32 overhangs the retracted lip 33 as the wheel is rotated in a clockwise manner to the right of the center of the board.

The wheel 26 is normally intended to be rotated in a clockwise direction and each pocket 30 is presented opposite the platform 40 in sequence so that an object moved through the entrance passage 31 will be retained within the pocket adjacent the retracted lip 33 until the pocket 30 in which the object is retained is moved to a downward position allowing the object to drop by gravity out of the pocket. Positioned above the wheel 26 is a hopper 34 formed and arranged to receive a plurality of spheres 35 such as marbles or balls which are used by the players of the game device 10. The hopper 34 is formed with a slanting floor 36 which termi-

nates in a downwardly opening throat 37. Placed in communication with the throat 37 is a downwardly extending zigzag passage 38 formed by the strips 39 carried by the back wall 21 and angularly placed relative to each other and having certain of the ends thereof spaced from the side spacers 23 to form a continuous maze-like passage extending downwardly from the hopper 34 to a positioning platform 40 spaced adjacent the outer periphery of wheel 26. The gravitational movement of the balls along passage 38 can be increased or decreased as desired by increasing or decreasing the relative inclination of strips 39. It is the object to have balls 35 roll onto platform 40 with sufficient force to drop into each respective pocket as it is moved into position adjacent the platform on rotation of the wheel. The balls 35 are held in passage 38 by a face plate 41 positioned across the strips 39 extending downwardly from the hopper 34 to partially encircle the wheel 26. Face plate 41 is formed with transversely extending slots 42 generally sloped to conform with the incline of passage 38 but narrower in width than the section of balls 35 so that the balls may be retained for visible passage adjacent thereto. In some instances I have found it desirable to form the face plate of glass or other transparent material. Having the movement of the balls made visible to the players adds greatly to their interest in the game and also provides them with means for checking as to how many balls are remaining to be played.

The bottom portion of the wheel is rotated behind the frontboard 22 which is preferably formed opaque so as to conceal the movement of the balls 35 as they drop from the wheel pockets 30. The frontboard 22 is cut away to allow sufficient exposure of the wheel 26 for rotation by the player to advance the ball pockets 30 past the ball ledge 40 in sequence.

Positioned under the wheel 26 is a ball receiver 43 carried by the blackboard 21. The receiver 43 is divided into a plurality of ball receiving bins 44 by upright partitions 45 of varying position and height. The lengths of the partitions 45 are such that a ball 35 is directed into a selected bin in accordance with the angle of its descent from a wheel pocket 30, the height of the partitions being graduated so that an arc drawn through their uppermost points is concentric with the periphery of wheel 26. It is apparent that the angle of descent will be affected by the speed of rotation of wheel 26 so that the skill of the player as to how fast he operates the wheel determines to a great extent into which of the bins 44 the balls 35 are thrown or dropped. Extending downwardly from the ball delivery platform 40 to a point flush with the first bin 44 and having a curvilinear surface 48 (Figure 1) and spaced adjacent the outer periphery of wheel 26 is a retainer member 47. The retainer 47 is closely spaced from the wheel 26 so as to provide for its free rotation and also act as a guard against any misplacement of balls 35.

Beyond the bins 44 is a baffle member 49 having a curved surface faced toward the wheel and terminating adjacent the farthest bin to deflect and return any balls 35 back into the bins which have bounced over the partitions 45.

Opening outwardly from the bins 44 are individual bin holes 50 dimensioned to allow for unrestricted movement of the balls from the bins as they are thrown or dropped thereinto by the wheel 26. Extending away from the holes 50 is a grooved board 51 with the ball receiving end 52 thereof

disposed below the holes and secured to the face board 22 by hinges 53 or like securing means. The front or delivery end 54 is supported by an extension 55 of the side walls 13 being secured thereto by clips 56 or the like. The grooved board 51 is formed with individual grooves 60 communicating with each respective ball hole 50. The delivery end 54 of the board 51 is depressed relative to the receiving end 52 sufficiently to allow the balls to roll forwardly along individual grooves 60 as they emerge out of the holes 50. Hingedly mounted across the delivery end 54 of the board 51 is a gate 57 which is spaced from the hinged lid 61 and extends transversely of the board, normally positioned to hold the played balls until the play has been completed. Handles 58 are provided at each side of the gate for swinging of the gate to an open position to allow the accumulated balls to drop through an opening 59 onto the false bottom 17 along which they roll into the depository 18. In case it is desired to lift the balls from the front of the device 10 a suitable stop means can be placed across the false bottom 17 immediately back of the opening 59 against which the balls will come to rest. Each of the individual grooves 60 of the board 51 is formed of sufficient depth as to retain the balls 35 separated until released by gate 57. In this position they can be readily counted so as to ascertain the total number of balls which each player has played into the respective grooves 60. The grooves are preferably numbered with numbers of increasing value extending from the right to the left such as 100, 200, etc., as shown for scoring purposes as it is apparent that it will require a higher degree of skill on the part of a player to rotate wheel 26 so as to deliver balls 35 into a chosen bin rather than to merely drop the balls into the first or right-hand bin.

The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

1. In a game device, the combination, of a base, an upright support mounted on the base, a pocketed wheel mounted on the support for rotation above the base, a hopper mounted above the wheel adapted and arranged to receive balls deposited therein, a continuous tortuous passage formed with a plurality of baffles therein extending from the hopper to a point adjacent the upper periphery of the wheel for conveying the balls to said wheel for intermittent gravitational movement into the pockets thereof, a plurality of spaced partitions forming bins disposed below the wheel for selectively receiving balls dropped from the pockets on rotation of the wheel, a board having scoring grooves therein extending from the bins, stop means hingedly positioned over the grooves for holding the balls and receiving means positioned in said base below the grooves for gravitational movement of the balls to a storage point.

2. In a game device, the combination, of a rotatably mounted wheel having outwardly extending spaced pockets, feeding means including a hopper and a plurality of baffles forming a tortuous passage in communication with said wheel and adapted for intermittently feeding spherical objects to the wheel, a plurality of passages leading from the wheel, a hinged board leading from said plurality of passages having a plurality of individual grooves, and a stop means comprising a gate hinged to said board transversely extendable across said grooves.

3. In a game device the combination of a base, an upright carried by said base and including front, rear and end walls, a wheel having a plurality of pockets therein rotatably mounted between said front and rear walls, a hopper carried by the upper end of said front wall adapted for the intermittent feeding of spherical objects to the wheel, a plurality of inclined baffles forming a tortuous path from said hopper to a point adjacent the upper periphery of said wheel, a plurality of vertical partitions of unequal stepped height between said side walls beneath said wheel, said front wall being provided with apertures between adjacent baffles, a board hingedly connected to said front wall adjacent and below said apertures inclined outwardly from said front wall, said board having a plurality of parallel grooves therein, each groove being aligned with one of said apertures, a gate hingedly connected to said board, and means forming a receptacle in said base for the reception of spherical objects rolling from the end of said board.

CHARLES M. FRANKS.

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