

[72] Inventor **Jeffrey D. Breslow**  
Chicago, Ill.  
[21] Appl. No. **797,522**  
[22] Filed **Feb. 7, 1969**  
[45] Patented **June 1, 1971**  
[73] Assignee **Marvin Glass & Associates**  
Chicago, Ill.

1,958,563 5/1934 Brooker et al. .... 273/129  
2,720,397 10/1955 Blanton ..... 273/85(E)  
3,379,441 4/1968 Feather et al. .... 273/94

## OTHER REFERENCES

"Popular Science Monthly" Vol. 174, No. 1, Jan, 1959, P. 132 Q1P8

Primary Examiner—Richard C. Pinkham  
Assistant Examiner—Marvin Siskind  
Attorneys—James F. Coffee and Gerald M. Newman

[54] **GAME INCLUDING MECHANICAL PROJECTORS, PROJECTILES, AND TARGET**  
7 Claims, 4 Drawing Figs.

[52] U.S. Cl. .... 273/108,  
273/123, 273/129, 273/136, 46/150

[51] Int. Cl. .... A63b 71/00

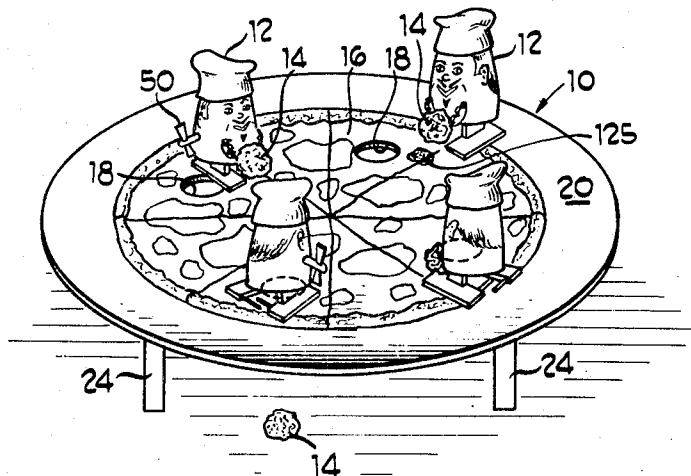
[50] Field of Search ..... 273/86.0,  
86.4, 108, 119, 123, 129; 46/116, 145, 150

[56] **References Cited**

## UNITED STATES PATENTS

974,661 11/1910 Hamilton ..... 273/128UX

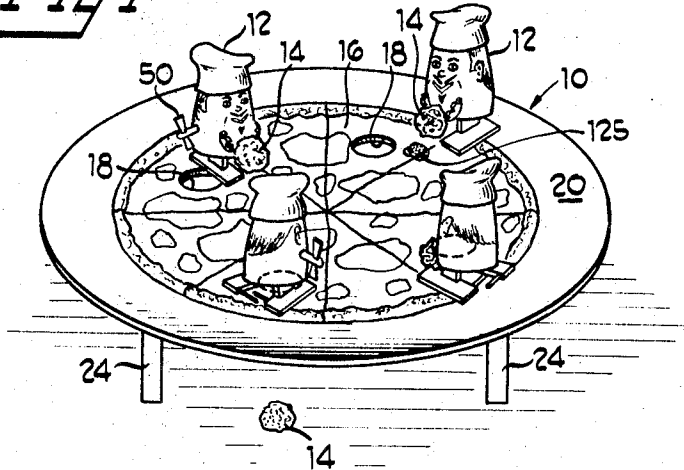
**ABSTRACT:** Target game apparatus including an elevated game board simulating a pizza pie having a target aperture therethrough, a plurality of mechanically propelled game members simulating pizza pie chefs, and a number of projectiles simulating pieces of sausage. The game members are oriented at the edge of the board in a direction calculated to move a projectile through a target aperture, and thereafter operate in a generally unassisted manner.



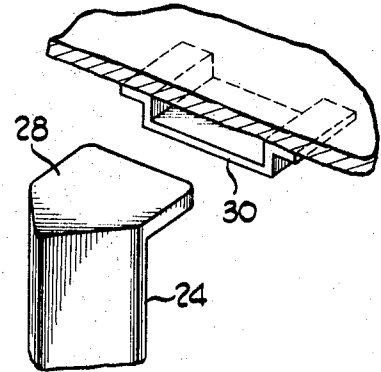
PATENTED JUN 1 1971

3,582,079

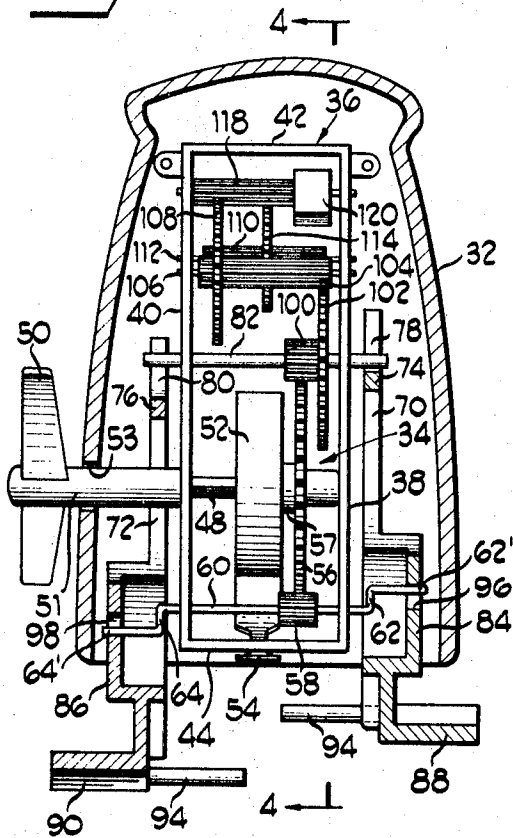
*Fig 1*



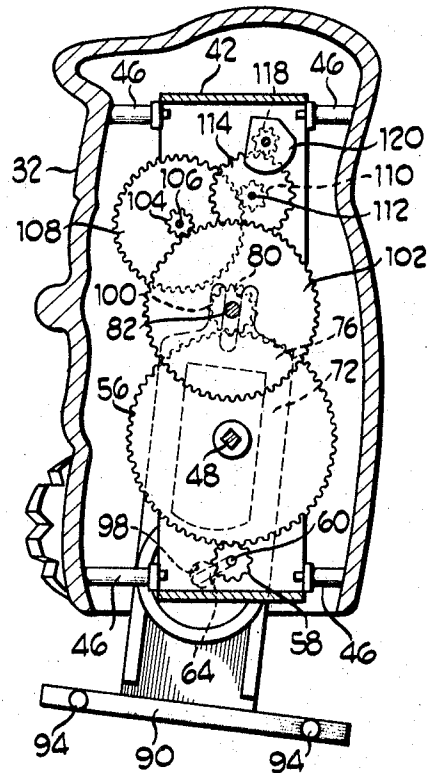
*Fig 2*



*Fig 3*



*Fig 4*



INVENTOR  
JEFFREY D. BRESLOW

BY *Gerold M. Thuman*  
ATTORNEY

## GAME INCLUDING MECHANICAL PROJECTORS, PROJECTILES, AND TARGET

This invention relates in general to games. In particular, this invention is directed to a target game wherein projectiles are moved toward game targets in a manner generally unassisted by the game players.

The game apparatus of the invention comprises an elevated, horizontal game board having a plurality of target apertures. A number of playing pieces and a plurality of mechanically propelled members suitable for moving the playing pieces toward the targets, are placed on the game board surface. The mechanical members are initially oriented in a direction which is calculated to move a playing piece toward a target aperture, but thereafter they operate unassisted by the game players.

The primary object of this invention is to provide mechanical game apparatus suitable for use by a number of game players.

Another object of this invention, is to provide game apparatus suitable for simultaneous use by the game players so that each player is actively engaged in pursuing the game objective rather than merely observing the other game players in their pursuit of the objective.

Additional objects of this invention will become apparent to those versed in the game art upon an understanding of the following description of the game apparatus taken in conjunction with the accompanying drawings, in which a preferred embodiment of the game apparatus is shown, and wherein:

FIG. 1 is a perspective view of the game apparatus of the invention;

FIG. 2 is a fragmentary, enlarged, perspective view of a supporting leg and the leg receiving portion of the game board;

FIG. 3 is an enlarged, elevational, partial cross-sectional view of a self-propelled mechanical member of the game apparatus of the invention; and

FIG. 4 is an elevational, cross-sectional view taken along section line 4-4 of FIG. 3.

Turning now to FIGS. 1 and 2 of the drawings, the game apparatus of the invention generally comprises a circular game board 10, a number of self-propelled game members 12 and a plurality of playing pieces 14 suitable for being moved across the surface of the game board by game members 12.

Game board 10 comprises a circular central playing area 16 and a peripheral area 20 forming a boarder around the playing area. A number of circular target apertures 18 are provided through the game board in the central playing area. The board is supported in an elevated position above a surface 22, such as a table or floor, on a number of legs 24 each having an integral, upper horizontal extension 28 which cooperates with a horizontal opening in a channel member 30 underlying the game board. The board is assembled by inserting each of the leg extensions 28 into the channel openings to thereby elevate the playing surface. This enables playing pieces 14 to fall through target apertures 18, enhancing the amusement aspect of the game apparatus.

The central playing area 16 of the game board is appropriately illustrated to simulate a pizza pie. Playing pieces 14 are suitably sized to readily pass through any of the target apertures 18.

Finally, the self-powered game members are fabricated to simulate pizza pie chefs and are adapted for movement across the game board to push the sausages to the target apertures.

Turning now to FIGS. 3 and 4 of the drawings, the self-powered game members 12 will be described in detail. Each game member comprises a shell 32, molded to simulate a pizza pie chef figure. The shell houses a spring-powered mechanism 34 which drives the chef figure for self-propelled movement thereof.

The drive mechanism includes a frame 36, comprising a pair of spaced-apart, vertical sidewalls 38 and 40, and upper and lower spaced-apart frame walls 42 and 44. Frame 36 is secured interiorly of shell 32 by a number of horizontal spaced lugs 46 adjacent the top and bottom of the frame.

A main shaft 48 of the drive mechanism extends horizontally between frame walls 38 and 40 and is suitably journaled

in apertures provided therethrough. A turn key 50 having a shank 51 is secured to an external end of shaft 48. Shank 51 passes through an opening 53 formed in the shell for enabling a user to wind the mechanism by tensing a coiled drive spring 52. The interior end of drive spring 52, not shown, is secured to shaft 48 while its exterior end is fixed relative to the frame by threading it through a suitable aperture in the frame and providing an enlarged end tab 54.

A large drive gear 56 is carried on shaft 48 and is coupled for selective corotation with the shaft by a one-way ratchet clutch. Clutch 57 enables the drive spring to be tensed by turn key 50 without the resistive drag of the gear mechanism while positively transmitting the unwinding movement of the spring to drive gear 56. Gear 56 meshingly engages a spur gear 58 secured to a horizontal shaft 60 which is journaled in sidewalls 38 and 40. Shaft 60 includes crank arms 62 and 64 which extend outwardly of sidewalls 38 and 40 and are diametrically offset. Crank arm 62 and 64 terminate in ends 62' and 64' respectively, which traverse a relatively large rotational arc.

The game member includes legs 70 and 72 disposed outwardly of frame sidewalls 38-40, but inwardly of shell 32. The legs have upper portions 74 and 76, respectively, each of which define vertically elongated slots 78 and 80. Slots 78 and 80 cooperate with the extending terminal ends of a shaft 82 which is journaled in frame sidewalls 38 and 40.

The legs also include middle portions generally located at the hip position and referred to by numerals 84 and 86, and they terminate with feet 88 and 90. Each foot has a pair of balancing or stabilizing dowels 94 which enable the game member to be supported on one foot without falling or tipping over. Thus the game member may be propelled by balancing on one foot while the other foot is moved in a forwardly direction. Hip members 84-86 define apertures 96 and 98 through which the rotating ends 62'-64' of the crank arms extend.

Operationally, the tensed spring 52 drives gear 56 which in turn rotates spur gear 58 and crank 60. Rotational movement of arm ends 62'-64' and cooperation of their respective apertures 96-98, causes each foot to be sequentially lifted from the surface, moved forwardly while the upper end of the leg pivots on shaft 82, and finally placed on the game board. While one foot is being lifted, the other serves to balance the game member. As the feet alternately move in the described manner, the chef figure simulates a walking appearance.

A governor is provided for regulating the speed of the game member by controlling the rate at which energy from the tensed spring is transferred to shaft 60. The governor includes a spur gear 100 engaged by the large gear 56 and carried on shaft 82. A large gear 102 is corotatable with gear 100 and is also carried on shaft 82. Gear 102 cooperates with an elongated spur gear 104 rotatably carried on a shaft 106 which also carries a corotatable large gear 108. Gear 108 in turn cooperates with a small gear 110 rotatably supported on a shaft 112 which also supports a large gear 114 which in turn cooperates with a governing gear 118 rotatably coupled to an eccentric flywheel 120. The ratio of the gears causes the flywheel to rotate at a very high speed and the varied momentum from the eccentric nature of the flywheel is synchronized to the lifting movement of the feet.

Turning now to the play of the game, each player chooses a chef figure 12 for use during the game play. One player is selected to be in charge of the sausage playing pieces 14 and at the beginning of the game, a number of sausage pieces, such as four, are placed on color indicated area 125 on the surface of the pizza pie. It is the responsibility of the selected player to insure that there are four pieces of sausage on the pie at all times and as soon as one is pushed through a target opening, it should be immediately replaced by another sausage piece.

Each player now winds his chef figure 12 by turning key 50, and places it in the peripheral area 20 of the game board. All the chef figures are placed on the game board at the same time, and their simultaneous movement thereacross enhances the action of the game. In placing the chef in the peripheral

area, it is aimed in the direction which is calculated to push a playing piece 14 across the game board and cause it to fall through a target aperture 18. The chef figures may also be aimed at chef figures of other players in order to block their movement.

Movement of the chef figures is unassisted when they are in the central playing area 16, and the players are not allowed to touch a chef figure when it is in this area except to remove the figure from the playing surface. This may be done if the figure is traveling in the wrong direction, requires additional winding, or if it falls down on the playing surface. When removed from the board, the figure is always replaced on the peripheral area. The player whose chef figure pushes the most playing pieces through the target apertures is deemed the winner of the game.

What has been described is a game apparatus having movable mechanical game members which are generally unassisted during their course of movement on a game board surface for moving playing pieces through a number of target apertures.

While the described embodiment of the game apparatus incorporates a simulated pizza pie, simulated pizza chefs, and simulated sausage pieces, other embodiments such as a simulated lunar surface with simulated space vehicles and meteorite projectiles, may be employed.

It is obvious that upon study by those skilled in the game art, the disclosed invention may be altered or modified without departing from its inventive concept.

What we claim is:

1. Game apparatus comprising: an elevated, generally horizontal board surface forming a plurality of target apertures; a plurality of playing pieces suitable for passage through said target apertures disposed on said board surface; and a plurality of self-propelled motor-driven means positioned on said board surface, each under the initial direction of a game player, and suitable for unassisted movement thereacross for moving said playing pieces on said surface to the target apertures.

2. The game apparatus as set forth in claim 1 wherein said board surface includes a central playing area defining said apertures and a peripheral starting area whereat said motor-driven means may be initially positioned prior to release and subsequent movement across said board surface.

3. The game apparatus as set forth in claim 2 wherein said central playing area simulates a pizza pie; wherein a plurality of playing pieces are provided, each simulating sausage for said pizza pie, and wherein said self-powered means simulate a pizza pie chef figure having alternately reciprocally driven feet for propelling said figure across said board surface.

4. The game apparatus as set forth in claim 3 wherein said game board includes additionally, a number of designated areas each generally diametrically opposite a target aperture, for initial placement of a sausage playing piece, and wherein said game players simultaneously direct wound chef figures from said peripheral area along a path calculated to push a playing piece toward a target aperture.

5. Game apparatus for use by a number of game players comprising: a horizontal game board having a number of game targets; spring-powered mechanical means suitable for unassisted movement over the surface of said game board; and a plurality of playing pieces disposed on said board surface, whereby each of said game players simultaneously direct one of said means in a direction calculated to cause a playing piece to be moved toward the game target.

6. The game apparatus as set forth in claim 5 wherein said board is generally circular and includes a central playing area defining a plurality of target apertures and a peripheral border area surrounding said central area wherein said mechanical means are initially disposed.

7. The game apparatus as set forth in claim 6 wherein said central board area simulates a pizza pie, said playing pieces simulate sausage pieces and said mechanical means simulate pizza pie chefs having alternately movable feet for propelling said figures on the game board.

40

45

50

55

60

65

70

75