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3,420,525

GAME APPARATUS

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Filed June 20, 1966, Ser. No. 558,690

U.S. Cl. 273—135
Int. Cl. A63f 3/00

10 Claims 5

ABSTRACT OF THE DISCLOSURE

A game device comprising a multisided roller having the same series of numbers on each side, with the numbers being in different order on successive sides. The roller is enclosed in a housing having a cover provided with a separate window for each number in the series, each window having a removable cover. The game is played by first removing any one of the covers, noting the number thus exposed, counting this number of covers from either end of the series, and removing the cover thus selected. This procedure is continued until an exposed number does not designate a closed window, the player's score being then computed by adding the numbers below the windows which remain closed.

An important object of the present invention is to provide a gameboard having a rotatable member with indicia thereon in the form of spaced numbers.

Another object of the invention is to provide a gameboard used in a game that is interesting and entertaining.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIGURE 1 is a perspective view of a gameboard embodying one form of the invention, several of the covers being shown displaced revealing the numbers.

FIG. 2 is a horizontal sectional view thereof.

FIG. 3 is a cross-sectional view taken on the plane of the line 3—3 of FIG. 2.

FIG. 4 is a view similar to FIG. 1 showing a modified form of the invention, parts being shown broken away.

FIG. 5 is a part sectional and part plan view of the parts shown in FIG. 4.

FIG. 6 is a vertical sectional view taken on the plane of the line 6—6 of FIG. 5.

FIG. 7 is a vertical sectional view taken on the plane of the line 7—7 of FIG. 5.

FIG. 8 is a perspective detail view of the slide cover.

FIG. 9 is a fragmentary perspective view of a gameboard embodying another modified form of the invention.

FIG. 10 is a sectional view of the gameboard shown in FIG. 9.

FIG. 11 is a vertical sectional view taken on the plane of the line 11—11 of FIG. 10.

FIG. 12 is a vertical sectional view taken on the plane of the line 12—12 of FIG. 10.

FIG. 13 is a perspective detail view of the detent latch shown in FIG. 10.

Referring now in detail to the various views of the drawings, in FIG. 1 a gameboard 10 is shown embodying one form of the invention. The gameboard 10 comprises an elongated box-like container 12 rectangular in configuration and in cross-section and formed of wood, paperboard

or other suitable material. The container includes a bottom wall 14, side walls 16, 18 and end walls 20, 22. The container is open at the top but is adapted to be closed by a cover 24 seated on the top edges of the side and end walls. End wall 20 is formed with a bearing opening 26 centrally thereof, and end wall 22 with a slot 28 centrally thereof and intersecting the top edge of the end wall 22.

An elongated solid cylindrical wooden roller 30 is rotatably mounted inside the container centrally thereof. The roller is formed with end trunnions or stub shafts 32, 34, shaft 32 being journalled in the opening 26 in end wall 20, and shaft 34 journalled in the bottom of the slot 28 in end wall 22. A knob 35 is fixed on the protruding end of shaft 32 by means of a set screw 37, for turning the roller. The body of the roller 30 is multi-sided as indicated at 36 in FIGS. 2 and 3, the sides extending from end to end thereof and being flat.

Indicia 38 in the form of a series of numerals is placed on the flat sides 36 of the body of the roller, the numerals being equally spaced therealong. The numerals are annularly aligned around the body of the roller. The numerals are promiscuously or irregularly arranged on the flat sides, that is, they are not consecutively arranged from end to end therealong. For instance, as shown in FIG. 2, on one flat side appear the numerals, reading from left to right, 4, 1, 3, 5, 6, 2 and 7. An adjacent flat side has numerals reading from left to right as follows: 1, 3, 5, 6, 2, 7 and 4.

The cover 24 is formed with a series of circular windows 40 spaced therealong centrally thereof, the spacing being the same as spacing between the numerals on the roller 30, so as to reveal the numerals. Disc-shaped covers 42 are slidably and removably mounted on the box cover 24 for covering the windows and concealing the numerals. A number of covers 42 slightly larger than the windows are provided for closing the windows 40. The covers 42 are flat and disc-shaped so that they can readily be slid over the surface of the cover 24 and over the windows 40 to conceal the numerals and be slid away from the windows to reveal the numerals thereunder. Adjacent one end, the body of the roller 30 is formed with a series of circular shallow recesses 44 in annular formation, one recess being formed on each flat side 36. Coacting with these recesses 44, there is an elongated spring finger 46, one end thereof being fixed to the inner surface of side wall 16 by means of a block 48 fixed to the wall by screws 50. The other free end of the spring finger is adapted to snap into one of the recesses 44 for holding the roller against rotation.

In using the gameboard 10 in playing the game, the roller 30 is turned by means of the knob 35 and a set of numbers 38 positioned underneath and in line with the windows 40. The windows are covered by means of the covers 42. The gameboard 10 is ready for playing. A first player, by means of his finger, slides a selected cover 42 away from the window 40, revealing a number in the window. For example, number 3 is revealed. This number 3 controls the next move by the player. The number 3 directs that the third cover 42 from either end must be removed from its window. For example, the cover on the third window from the left as viewed in FIG. 1 is removed revealing the number 5, for example. The next move by the player is governed or controlled by the number 5, which number directs that the fifth cover from either end, if still in closing position, is to be removed from its window. For example, the cover on the fifth window from the

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left as viewed in FIG. 1 because the fifth cover from the right has already been removed and is not in closing position. Removal of the fifth cover from the left reveals the number 2. The next move by the player is again controlled by the number 2, which number directs that the second cover 42 from either end of the gameboard is to be removed from its window. For example, the cover on the second window from the right as viewed in FIG. 1 because the second cover from the left has already been removed and is not in closing position. Removal of the second cover from the right reveals the number 7. The next move by the player is again controlled by the last number revealed, to wit, 7, which number directs that the seventh cover from either end still in closing position be removed from its window. For example, the cover on the seventh window from the left as viewed in FIG. 1 is removed revealing the number 4 for example. The next move by the player is again controlled by the last number revealed, to wit, 4, which number directs that the fourth cover from either end still in closing position be removed from its window. For example, the cover on the fourth window from the right as viewed in FIG. 1 is removed, revealing the number 6 for example. The next move by the player is again controlled by the last number revealed, to wit, 6, which number directs that the sixth cover from either end still in closing position be removed from its window. Inasmuch as the sixth window from each end of the gameboard is uncovered there is no cover on the sixth window from either end. Accordingly, the player is stopped from moving again and therefore his score is computed. From an inspection of the gameboard, only one window is left covered and the player is penalized the amount equal to the number in said window, for example, 1. The first player has 1 point marked against him.

The gameboard is now prepared for the next player or the opponent of the first player, by sliding the covers 42 back on top of the windows and by giving the roller 30 a turn by means of the knob 35, bringing a new set of numerals 38 into position in the windows 40. The next player or opponent makes his moves in a similar way as the first player has done, being guided and controlled by the numbers revealed when the covers are removed. If any window 40 remains covered, the opponent is penalized a number of points equivalent to the number appearing in said window when its cover is removed.

A predetermined number of penalty points is established as the number to avoid reaching, and the player first reaching such number of points loses the game. Of course, other rules may be established for playing games with the gameboard 10.

In FIGS. 4-8, inclusive, a gameboard 10' somewhat similar to gameboard 10 is shown. Gameboard 10' comprises an elongated box-like container 12' with bottom wall 14', side walls 16', 18' and end walls similar to end walls 20 and 22 of container 12, only one end wall 20' being shown. The container 12' is open at the top and is adapted to be closed by a cover 24' seated on the top edges of the side and end walls.

The cover 24' is formed with a series of circular windows 40' spaced therealong centrally thereof over the roller 30', the spacing of the windows being the same as the spacing between the numerals 38' on the roller so as to reveal the numerals. The cover is also formed with a series of square shaped openings 54 spaced therealong, each square shaped opening being alongside a circular window 40'. Crossribs 56 are formed on the top surface of the cover in spaced relation, a window and a square shaped opening being disposed between a pair of crossribs. The crossribs have downwardly converging edges 58. Covers 42' are slidably mounted on cover 24' for covering the windows 40'. The covers 42' are rectangular in shape and flat, with a rack 60 on the bottom surface thereof, as viewed in FIG. 4 adjacent one long side thereof. The sliding movements of the covers are guided by the edges of the crossribs 56.

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An elongated round shaft 58 is mounted inside the container parallel to the roller 30' with one end journalled in a bearing opening 60 in end wall 20' and the other end journalled in a similar bearing opening in the wall opposite to wall 20' (not shown). The shaft also slides in these bearing openings. A knob 35' is mounted on the end of shaft 58 outwardly of end wall 20', for turning the shaft 58. A plurality of gears 62 is fixed on shaft 58 inside the container in equidistantly spaced relation. A gear 62 is fixed on the shaft in line with each annular series of numerals 38'. A compression spring 64 is sleeved around the shaft 58, one end being seated on the inner surface of end wall 20' and its other end pressing against the endmost gear 62 to the right as seen in FIG. 5. Another gear member 66 is fixed on shaft 58 between the endmost gear 62 and the next adjacent gear 62. Gear member 66 is formed with segmental gear sections 68 with smooth sections 70 therebetween. The gear sections 68 are disposed to mesh with the teeth 56 on the broad gear 57 on roller 30', and to slide along said teeth 56 on gear 57. An elongated detent spring finger 46' similar to detent finger 46 is similarly fixed on the inner surface of side wall 16'. The detent finger 46' is formed with a bent end 70' adapted to snap into the triangular shaped recesses 44' on the roller 30' for releasably holding the roller in moved position.

A game may be played on the gameboard 10' with rules similar to the rules for using the gameboard 10. In using the gameboard 10', assuming that the removable covers 42' are in closing position over the windows 40', the shaft 58 is turned, bringing a fresh set of numerals 38' in line with the windows 40' on the cover 24'.

The game is played according to the rules described for the gameboard 10 of FIG. 1 and the covers 42' are manually moved from the windows 40' by the finger of the player to uncovering inoperative position as shown in FIG. 4. When all of the covers 42' have been removed and the game is over, the shaft 58 is pulled outwardly until the gears 62 mesh with the racks 60 on the covers 42', whereupon the shaft is turned and the turning gears slide all of the covers 42' simultaneously to window covering position as shown in FIG. 4. A smooth section 70 on gear member 66 being now adjacent gear 57, the latter is not moved.

FIGS. 9 to 13, inclusive, illustrate another modified form of gameboard 10'' shaped similarly to the shape of gameboard 10 with bottom wall 14'', side walls 16'' and 18'' and end walls, only one end wall 20'' being shown. The open top is closed by a cover 24''. The roller 30'' is constructed and arranged similarly to roller 30 and is provided with spaced numerals 38''. One end of the roller 30'', however, is formed with an axial recess 74 formed with inner axial teeth 78. A stub shaft 32'' extends through a flanged bushing 80 in an opening 82 in the wall 20'', extending inwardly and outwardly of the wall. A knob 35'' is fixed on the outer end of the shaft and a pinion 84 on the inner end thereof, the pinion being in mesh with the inner teeth 78. The pinion is formed with gear segments 85 and 87 and with smooth sections 89 therebetween. A compression spring 86 is sleeved around the shaft, seated at one end on the flanged bushing 80 and pressing against the knob 35'', urging the shaft outwardly. A spur gear 88 is fixed on the shaft inwardly of the end wall 20''. Gear 88 is normally in mesh with an idler gear 90 mounted on a shaft 92 extending through an opening in wall 20''. The portion of shaft 32'' mounting the pinion 84 and gear 88 is noncircular and the portion passing through bushing 80 and mounting the knob 35'' is circular. The opposite end of roller 30'' is journalled in the opposite end wall (not shown) similarly to roller 30 of FIG. 1.

The cover 24'' is formed with a series of circular windows 40'' centrally thereof in order to reveal the numbers 38'' on the roller 30''. Covers 42'' slidably mounted over the windows conceal the numerals. An elongated closed slot 94 is formed in the cover 24'' opposite one side of each window 40''.

On bottom wall 14" in line with points closely spaced from one side of the windows 40", there are L-shaped brackets 95 pivotally supporting plates 96 pivotally mounted at one end on the brackets by means of pivot pins 98, the other end of the plates being free and bifurcated. A spur gear 99 is fixed on the shaft 58" inside end wall 20" in mesh with the idler gear 90 whereby movement of the shaft 32" is transmitted to shaft 58". A cam 100 is fixed on shaft 58" opposite each pivoted plate 96, the plate being disposed in the path of movement of the cam. At one point along its length, shaft 58" is formed with an offset crank portion 102 and coacting with said portion 102 there is a detent spring 104 having one end riveted to the bottom wall 14" with its other curved end pressing against the crank portion 102 to urge the cams 100 away from the plates 96. Each cover 42 has an L-shaped finger 106 fixed on its under surface as viewed in FIG. 9, one leg 108 of the finger being vertically disposed and extending through the adjacent slot 94, the other horizontally disposed leg 110 extending underneath the surface of the cover 24', closely spaced therefrom, and projecting through the bifurcations 112 of the adjacent plate 96.

In playing a game with gameboard 10" the rules pertaining to play on gameboards 10 and 10' prevail. In using gameboard 10", the gameboard is conditioned for play by sliding the covers 42" over the windows 40". A set of numerals 38" is set in position under the windows by rotating roller 30" by sliding shaft 32" inwardly to carry gear 88 thereon free of idler gear 90 and then rotating the roller. Pressure on shaft 32" is then released and the spring 86 retracts the gear 88 to meshing relation with idler gear 90. After all of the covers 42" have been slid away from the windows and the game is over, the covers may be retracted to window covering position simultaneously by turning the shaft 32" whereby gear 88 turns shaft 58" through gears 90 and 99 against the action of detent spring 104. Turning of shaft 58" carries the cams 100 against the pivoted plates 96 which are interlocked with the fingers 106 of the covers 42" and slide the covers to operative window closing position as shown in FIG. 9. Since a smooth section 89 on pinion 84 is now adjacent teeth 78, the roller is not rotated by shaft 32". When pressure on knob 35" is released, the detent spring 104 will press the shaft 58" to normal position as shown in FIG. 9 through its crank portion 102.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

What is claimed is:

1. In a gameboard of the kind described, an elongated rectangular shaped container with bottom side and end walls and being open at the top, a cover for the open top thereof, said cover having a series of spaced windows centrally thereof, a roller inside the container below the cover journaled in the end walls thereof, said roller carrying a plurality of series of circumferentially spaced numerals 1, 2, 3, 4, 5, 6, 7, corresponding to the number of windows, said numerals adapted to be moved selectively into alignment with the windows by rotating said roller, the numerals of one series being different in arrangement from the arrangement of the numerals of an adjacent series, means for rotating said roller, individual removable covers for the windows and means for preventing accidental overrunning of the roller.

2. In a gameboard as defined in claim 1, wherein the roller is elongated and noncircular in cross section, with elongated flat sections with the numerals spaced along the flat sections, the numerals being promiscuously disposed along the flat sections, the numerals on one section being different in arrangement from the arrangement of the numerals on an adjacent flat section.

3. In a gameboard as defined in claim 1, wherein the

means for rotating the roller includes a knob on one of the journaled ends of the roller outwardly of the adjacent end wall of the container.

4. In a gameboard as defined in claim 1, wherein the roller is elongated and noncircular in cross-section, with elongated flat sections, with the numerals spaced along the flat sections, the numerals being promiscuously disposed along the flat sections, the numerals on one section being different in arrangement from the arrangement of the numerals on an adjacent flat section, the means for rotating the roller including a knob of one of the journaled ends of the roller outwardly of the adjacent end wall of the container.

5. In a gameboard as defined in claim 1, wherein the roller is provided with a gear on the outer surface thereof, and wherein the means for rotating the roller includes a shaft journaled in the end walls of the container and disposed parallel to the roller, and a gear member fixed on the shaft in mesh with the gear on the outer surface of the roller whereby rotation of the shaft turns the roller, and a knob on the outer end of the shaft.

6. In a gameboard as defined in claim 1, wherein the roller is formed with a series of spaced circular shallow recesses in annular formation therearound and wherein the means for preventing accidental overrunning of the roller includes an elongated spring finger fixed at one end to one side wall of the container, the other end of the spring finger movable over the roller and adapted to snap into one of said recesses to hold releasably the roller in moved condition.

7. In a gameboard as defined in claim 1, wherein means are provided for guiding the movement of the removable covers, and means are provided for simultaneously retracting said removable covers to operative window-covering position.

8. In a gameboard as defined in claim 7, wherein the cover retracting means includes a slidable and rotatable shaft journaled in the end walls of the container, racks on the under surface of the removable covers, spaced gears on said shaft adapted to mesh with said racks, a knob on one end of said shaft outwardly of one of the end walls, said gears normally being out of mesh with said racks, and adapted to be moved into mesh with said racks by outward sliding of said shaft whereby upon turning of the shaft by the knob, the removable covers will be retracted to operative window closing position.

9. In a gameboard as defined in claim 1, wherein the roller is formed with an axial recess in one end thereof, said recess formed with internal teeth, and wherein the means for rotating said roller includes a shaft rotatable in one of said end walls, a knob on the end of the shaft outside said one end wall, a pinion member on the inner end of said shaft adapted to mesh with the internal teeth in the recess, for rotating the roller.

10. In a gameboard as defined in claim 9, wherein the top cover is formed with elongated closed slots extending thereacross with one end closely spaced from the windows, said removable covers having L-shaped fingers secured to the under surface thereof, the vertical legs of said fingers depending through said slots, the horizontal legs of said fingers extending parallel to and closely spaced below the cover, a second shaft journaled in the end walls of the container and disposed parallel to the roller, means for rotating said second shaft, bifurcated plates pivotally mounted on the bottom wall of the container and extending upwardly to points closely spaced inwardly of the top cover, adjacent the windows, the horizontal legs of the removable cover fingers interlocked with the bifurcations of the top ends of the pivoted plates, cams fixed on said second shaft and movable therewith, said bifurcated plates disposed in the path of movement of said cams whereby the removable covers interlocked with said plates are slid to positions over the windows, and a spring detent fixed at one end to the bottom wall and

engaging the second shaft at the other end for retracting the shaft when pressure thereon is released.

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