GAME BOARD WITH RETRACTABLE BALL RETURN

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Abstract
A game board adapted for use with a free movement game piece such as a ball, comprising a playing surface, an inner wall at an angle to the plane of the playing surface and an opening in the wall to receive the game piece from the playing surface. An outer wall is spaced from the inner wall and provided with an opening, and a game piece-return element is pivotally mounted in the space between the walls. TheGame piece-return element is biased in normal playing position such that it communicates with the opening in the inner wall to receive the game piece, and is inclined towards a cup section thereof which extends beyond and projects through the opening in the outer wall to permit the game piece to be retrieved therefrom. The game piece-return element is pivotally mounted so that it can be depressed within the space between the walls whereby the exterior surface of the cup section does not project beyond the exterior surface of the exterior wall.

7 Claims, 4 Drawing Figures
GAME BOARD WITH RETRACTABLE BALL RETURN

The present invention relates to improved game boards which employ one or more free movement game pieces such as balls, pucks, or the like, and which are provided with one or more return elements which extend beyond the frame of the game board for retrieval of the game pieces.

It is known to provide action game boards for soccer, ice hockey, baseball, bowling, pinball, and the like, in which the game piece leaves the playing surface after a score and deposits in an enlarged bin or rack from which it can be retrieved by hand through an enlarged opening in the frame of the game. While such a structure permits the game to be rectangular and free of projections, it is inconvenient because the bin or rack must be sufficiently large to accommodate the hand retrieving the game piece and the game piece is not always located easily therein or removed easily therefrom.

It is also known to provide action game boards with a fixed retrieval cup which extends beyond the frame of the game board and which delivers the game piece beyond the outer surface of the frame where it can be located and removed easily for replay. However since the retrieval cup extends beyond the surface of the frame of the game and is in fixed position, it is susceptible to breakage if the game is dropped, or during shipping of the game. Also the projection of the cup necessitates the use of a larger shipping container than otherwise would be necessary to accommodate the outer dimensions of the frame.

It is the principal object of the present invention to provide a novel action game board adapted for use with free movement game pieces and provided with one or more retrieval means which extend beyond the frame of the game board to facilitate retrieval of the game piece but which are resistant to breakage and which enable shipping of the game board in a container corresponding in size to the outer dimensions of the frame of the game board.

It is another object of this invention to provide a novel action game board having a retractable retrieval means which is biased in normal playing position without the necessity of springs or other elements susceptible to breakage or disconnection.

It is another object of this invention to provide a novel action game board having a retrieval means which is movable relative to the frame of the game board whereby the game piece can be assisted in its travel to the cup element of the retrieval means, if necessary, by movement of the retrieval means obviating the necessity of tipping the entire game board to free the game piece.

These and other objects and advantages of the present invention will be apparent to those skilled in the art in the light of the present disclosure including the drawings, in which:

FIG. 1 is a fragmentary plan view of a game board according to the present invention, a portion of the frame being cut away to expose the game piece-return element located within the frame.

FIG. 2 is a fragmentary end elevation view of the game board of FIG. 1, another portion of the frame being cut away to expose the game piece-return element mounted within the frame.

FIG. 3 is a fragmentary side elevation view taken along the line 3-3 of FIG. 1.

FIG. 4 is a fragmentary side view taken along the line 4-4 of FIG. 1.

The objects and advantages of the present invention are accomplished by means of a novel game piece-return element which is pivotally attached within the frame of a game board and which contains means for maintaining the return element in normal playing position and for permitting the return element to be depressed within the frame under the effects of pressure applied against the return element.

Referring to the drawings, in which like numerals identify the same element, the game boards of the present invention comprise a frame 1 enclosing a playing field 2 and having an inner wall 3 which is at an angle to the playing field for confining a game piece or ball 4 to the playing field 2. The inner wall 3 is provided with an opening 5 to permit the ball 4 to leave the playing surface onto a return element 6 for replay. The end of the frame 1 containing the return element 6 comprises a housing 7 comprising the inner wall 3 and an outer wall 8 within which the return element is pivotally mounted and a base board 9, shown in FIGS. 2 and 3, which provides a bottom covering for the game board.

The return element 6 is pivotally mounted within the housing 7 by free attachment to cross braces 10 and 11 by means of screw 12 and washer 12a and screw 13 and washer 13a, as shown in FIGS. 2, 3 and 4. The attachment is such that the floor 14 of the return element 6 is inclined from cross brace 11 down to cross brace 10, as shown in FIG. 2, and is also inclined outwardly from its position beneath inner wall 3 to the point where it exits outer wall 8 through opening 15 therein, as shown in FIG. 3.

The return element 6 comprises the inclined floor 14, rounded guide wall 16 which is fixed to and extends upwardly at an angle from floor 14 and guides the game piece 4 from the opening 5 in the inner wall 3 towards the point of furthest inclination of the floor 14, namely the return cup 17. The return element also comprises a flexible guide wall 18 which is attached to the floor 14 adjacent the return cup 17 but then extends beyond floor 14 and free of attachment thereto to provide a flexible spring element which contacts the inside of wall 3 to urge the return element 6 away from wall 3 so that the return cup 17 extends through opening 15 in outer wall 8, as shown by FIG. 1. FIG. 1 also illustrates, by means of broken lines, the position of the return element 6 and the flex of guide wall 18 when pressure is applied to push the return cup 17 as far as it will go into the opening 15 in the outer wall 8.

Referring to the attachment of the return element to the frame, FIG. 4 illustrates that the cross brace 11 is provided with a rounded rib 19 which extends beyond brace 11 and projects through a slightly oversize opening in the floor 14 of the return element 6 and which extends a distance slightly greater than the thickness of floor 14 whereby screw 13 can be tightened and yet the floor 14 is freely rotatable. The attachment of the return element 6 to the other cross brace 10 is identical except that the floor 14 of the return element 6 is provided with a slot 20 which permits the return element, pivoted on pin 19, to move between the positions illustrated by FIG. 1, cross brace 10 also being provided with a rounded rib 21 which extends into slot 20 and
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rides therein during movement of return element 6 from normal extended position to depressed position.

The embodiment illustrated is one of greatest simplicity, employing the least number of required movable parts. The frame for the game board is a unitary injection-molded plastic element comprising the housing 7, inner wall 3, outer wall 8 and the cross braces 10 and 11. The base of the inner wall may be tapered to the playing field 2, as illustrated, and the playing field may be attached to the underside of the tapered inner wall 3 by means of screws, as shown in FIG. 3. The return element 6 illustrated is also a unitary injection-molded plastic element comprising the inclined floor 14, the guide wall 16, the return cup 17 and the guide wall-spring element 18. No auxiliary spring is required although one can be used if desired to further assist the return of the element 6 to normal playing position. The unitary structure and mobility of the return element 6 is also useful in assisting the game piece in its progress to the return cup. If the game piece does not move directly to the return cup, as may happen particularly with non-spherical elements such as a hockey puck, the return cup 17 can be tapped inwardly a few times and the game piece will move down the inclined floor 14 into the cup 17.

If desired, the present game board can be provided with means for maintaining the return element 6 in depressed condition within the housing while the game is not in use. For instance, the wall 8 can be provided with an internal sliding door which can be slid to closed position when the return element 6 is depressed within the housing, or a hole can be provided in cup 17 to be engaged by a pin which can be inserted through an opening in base board 9 to lock the element 6 in depressed position.

Variations and modifications may be made within the scope of the claims and portions of the improvements may be used without others.

I claim:

1. A game board comprising a playing field adapted to be used in association with a free moving game piece, an inner wall enclosing said playing field and adapted to confine the game piece to the surface of the playing field, an opening in the inner wall adapted to permit the game piece to leave the playing field, a housing comprising said inner wall in the area of said opening and an outer wall spaced from said inner wall and having an opening therein, and a game piece-return element attached to said housing for pivotal movement between said walls comprising a floor inclined from the playing field and adapted to receive the game piece leaving the playing field through the opening in the inner wall, a cup extending from the lowest point of the inclined floor, and a spring means for maintaining the return element in normal playing position in which said return cup projects through the opening in the outer wall whereby a game piece can be removed from the cup outside the outer wall, the spring means permitting the pivotally mounted return element to be depressed within the housing so that the return cup does not extend beyond the outer surface of the outer wall such as for purposes of storing the game when not in use.

2. A game board according to claim 1 including, a guide wall extending at an angle from said floor to confine and guide the game piece within said return element to said return cup and a said spring means is flexible and engages a portion of the housing to push the return element into playing position, said flexible spring means yieldably engaging the housing to permit the return element to be depressed within the housing.

3. A game board according to claim 2 in which said game piece-return element is a unitary plastic element comprising said floor, guide wall, return cup and flexible spring means as a one-piece molded element.

4. A game board according to claim 2 in which said flexible spring means comprises a guide wall which extends at an angle from said floor, a portion of said guide wall being attached to said floor and an extension of said guide wall being unattached to said floor and being free to flex thereover.

5. A game board according to claim 1 in which the floor of the return element extends below the surface of the playing field and is movable beneath the playing field when the return element is pivoted.

6. A game board according to claim 1 in which the return element is attached to the housing by means of a pin which extends from the housing through a round opening in the return element to provide a pivot.

7. A game board according to claim 6 in which a second point of attachment is provided between the return element and the housing comprising a second pin, spaced from the first pin, extending from the housing through a slot in the return element to provide a guide for the pivotal movement of the return element.

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