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H. G. BREITENSTEIN

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GAME OF SKILL

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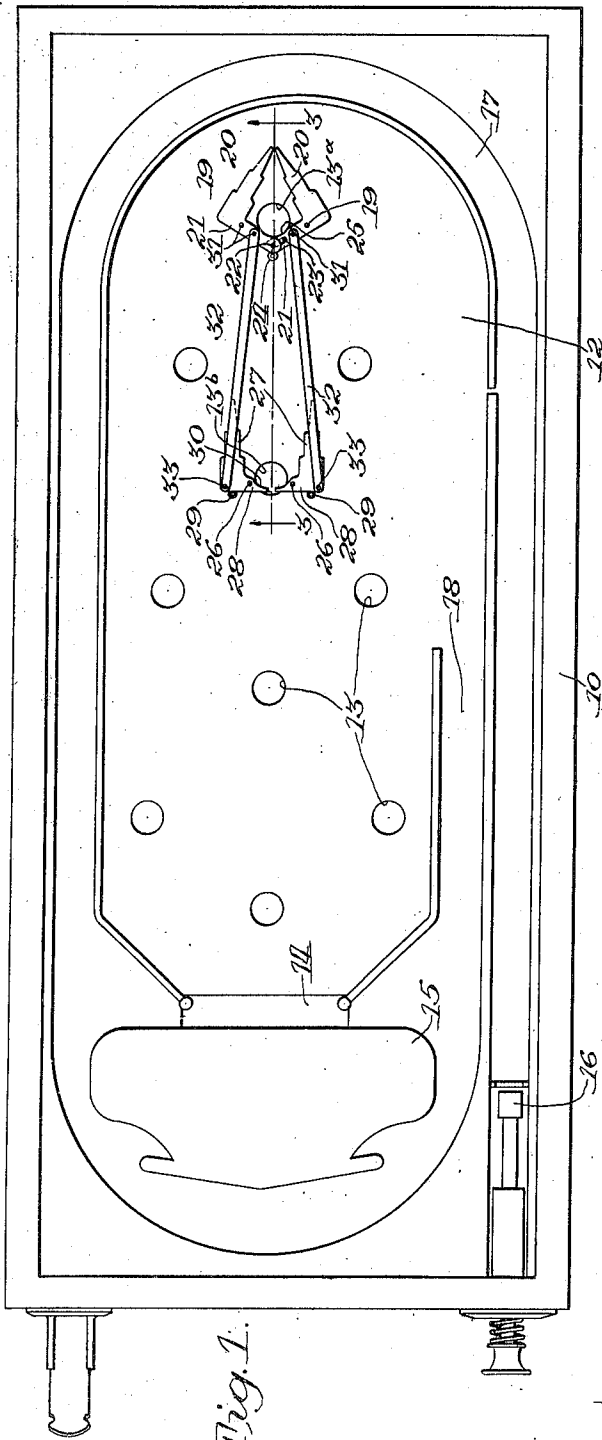


Fig. 1.

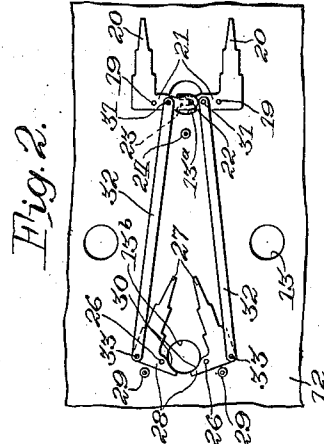


Fig. 2.

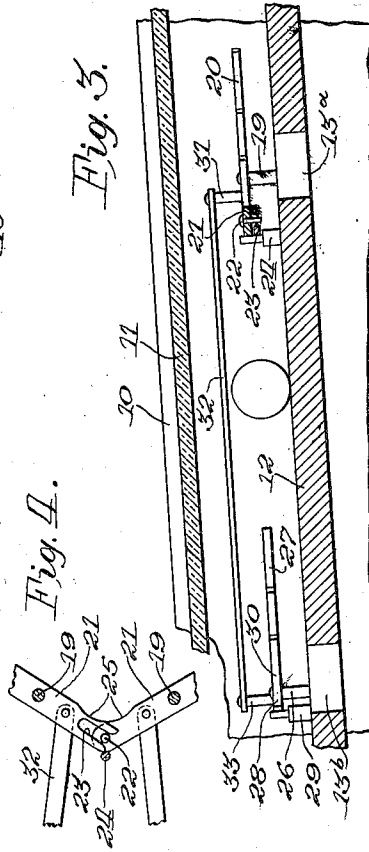


Fig. 3.

Fig. 4.

Inventor
Herbert G. Breitenstein
By Paul O. Pippel
Atty.

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GAME OF SKILL

Herbert G. Breitenstein, Chicago, Ill., assignor
to Raymond T. Moloney, Chicago, Ill.

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12 Claims. (Cl. 273—121)

The invention relates to a skill game for amusement, the game being of the ball projecting type, and the present improvement particularly relating to a ball switching and trapping device that will serve to make the play of the game more fascinating and enjoyable.

The primary object of the invention is to provide an improved ball switching and trapping mechanism for the purpose stated.

Another object is to provide a pair or plurality of interconnected devices of the type mentioned and associated with a pair or plurality of ball trap holes, the structure being such that when one device is in ball receiving position relative to the ball trap hole with which it is associated, the other one is closed to prevent a ball from being trapped by the hole with which it in turn is associated.

In the preferred example of the invention herein disclosed these objects are achieved by providing two spaced pairs of pivoted bell crank lever arrangements. In each pair the longer legs of the bell crank levers extend forwardly. When these longer legs are apart or open they are positioned to receive a properly directed ball gravitating down the inclined play board to trap the ball and cause it to drop through the hole in the board with which the pair of bell cranks is associated. Such movement of the ball closes the longer legs of the bell cranks and through appropriate links causes the other pair of bell cranks associated with another hole to be opened. Thus closing of one pair of bell cranks causes the other pair to open and vice versa.

In the sheet of drawings illustrating a practicable example of the invention:

Figure 1 is an enlarged general plan view of a ball shooting game showing the improved ball controlled switch and trap means;

Figure 2 is a plan view of the switch and trap means per se, in another position;

Figure 3 is a vertical, longitudinal view, partly in section, as seen along the line 3—3 appearing in Figure 1; and,

Figure 4 is a bottom plan view of the upper end of the switch and trap means.

The game is of the well-known ball projecting type comprising a box 10 closed at its top by a glass panel 11 under which is disposed a substantially horizontal but inclined play board 12 having therein a plurality of scattered, main ball receiving holes 13 and an auxiliary hole 14 adjacent a plate 15 to receive spent balls missing the main targets 13.

A ball shooter 16 is located in the usual place

along one edge of the board 12 to shoot balls one at a time around an oval track 17, said balls emerging onto the playing board 12 at 18. Two upper holes 13^a and 13^b are longitudinally alined in the present embodiment and with these two holes the novel trapping and switching device of the present invention is associated.

At each side of the hole 13^a is arranged a vertical pivot pin 19 and on each pin is pivotally mounted a horizontally swingable bell crank lever having forwardly projecting legs 20 and laterally projecting legs 21. The inner end of one of the legs 21 as best shown in Figure 4 carries a guide pin 22 slidable in a guide slot 23 in the adjoining leg 21 and to the rear of these connected inner ends of said legs 21 is a vertical pin 24 to limit the rearward swinging movement of the levers. The forward edges of these legs are arcuately cut out at 25 to receive a ball which may have entered the trap.

Adjacent the rear hole 13^b are a pair of vertical pins 26 on which is pivotally mounted a pair of similar bell crank levers also having forwardly extending legs numbered 27 and inwardly extending legs 28. Stop pins 29 are located in back of the legs. These bell cranks 20, 27 as shown in Figure 3 are at a height above the board 12 to be engaged properly by the balls. The inner ends of the legs 28 have their forward edges arcuated at 30 to fit the shape of a ball.

The inner ends of the legs 21 of the front, or upper device carry upright pins 31 for pivotally connecting the ends of a pair of coupling links 32 respectively to the two bell crank levers 20. Said links 32 at their other ends are pivotally connected to pins 33 located at the angles of the respective bell cranks 27. These links 32 are raised above the board 12 a sufficient distance to permit the projected balls to pass freely thereunder.

In operation the starting position of the switch and trap device would be as appears in Figure 2, where the legs 20 of the front pair of bell cranks are open to receive a ball directed to the upper hole 13^a. As the ball gravitates to the hole 13^a it engages the curved cut outs 25 to pivot the legs 21 away from over the hole 13^a and against the stop pin 24. The ball then drops into the hole 13^a and the legs 20 close to the position shown in Figure 1. As the bell cranks 20 swing closed the links 32 were pushed back to open the closed bell cranks 27 from the position of Figure 2 to the open position of Figure 1. The stops 29 limit the swinging movement of the bell cranks 27 in an obvious manner. A subsequently played

ball striking the upper closed pair of bell cranks 20 would be switched or deflected to one side or the other as it could not now enter the hole 13^a. However, such ball, or another gravitating down the board 12 could roll under the links 32 and pass to the open hole 13^b. Such ball would engage the legs 28 when dropping into the hole 13^b to pivot the bell cranks 27 to hole closing position (Figure 2) and at the same time the links 32 push the bell cranks 20 to open position exposing the hole 13^a to receive a ball again.

From this it can be seen that a simple device has been provided for the purposes stated which device achieves the objects heretofore recited.

It is the intention to cover all changes and modifications not departing from the spirit and scope of the invention as expressed in the following claims.

What is claimed is:

1. The combination with a substantially horizontal inclined game board having a hole therein to receive a projected ball, of a device comprising a pair of bell crank levers pivotally mounted on opposite sides of the hole, said levers each having longitudinally and transversely extending legs, and means to limit the swinging movement of said levers.
2. The combination with a substantially horizontal inclined game board having a plurality of holes therein to receive projected balls gravitating down the board, of a device comprising a pair of bell crank levers associated with each hole, and means interconnecting the pairs of bell crank levers.
3. The combination with a substantially horizontal inclined game board having a pair of holes therein to receive projected balls gravitating down the board, of a device comprising a pair of bell crank levers associated with each hole, means pivotally mounting the levers so that they may be moved into hole closing or hole exposing position, and means interconnecting the pairs of bell crank levers whereby when one pair of levers is in hole exposing position and receives a ball said one pair of levers is closed and the other pair is moved to hole exposing position.
4. The combination with an inclined game board having a pair of holes therein to receive balls projected across the board, of a device comprising a pair of pivoted levers embracing each hole, said levers being movable to hole exposing or hole closing positions, and means interconnecting the pair of levers at one hole with the pair of levers at the other hole.
5. The combination with an inclined game board having a pair of holes therein to receive balls projected across the board, of a device comprising a pair of pivoted bell crank levers having forwardly projecting legs at opposite sides of the holes and transversely projecting legs in back of the holes, there being a pair of such levers associated with each hole, and means connected between the pairs of levers whereby one pair is in hole exposing position and the other is in hole closing position.
6. The combination with an inclined game

board having a pair of holes therein to receive balls projected across the board, of a device comprising a pair of pivoted bell crank levers having forwardly projecting legs at opposite sides of the holes and transversely projecting legs in back of the holes, there being a pair of such levers associated with each hole, links connected between the pairs of levers whereby one pair is in hole exposing position and the other is in hole closing position, and means to limit the pivotal movement of the levers.

7. The combination with an inclined game board having a pair of holes therein to receive balls projected across the board, of a device comprising a pair of pivoted bell crank levers having forwardly projecting legs at opposite sides of the holes and transversely projecting legs in back of the holes, there being a pair of such levers associated with each hole, and links connected between the pairs of levers whereby one pair is in hole exposing position and the other is in hole closing position, said links being raised high enough above the board to permit a ball to pass freely thereunder.

8. A game of the character described, including: a playing field; means for propelling a marble on said playing field; means forming a score pocket on said playing field; means movably disposed so as to prevent entry of a marble into said score pocket; and control means operative in consequence of engagement by a marble to move said movable means from a position obstructing the entrance to said score pocket.

9. A game of the character described, including: a playing field; means for propelling a marble on said playing field; means forming a score pocket on said playing field; means forming an adjustable obstruction before said score pocket; and means operative by marbles on said playing field for adjusting said obstruction.

10. A game of the character described, including: a playing field; means for propelling a marble on said playing field; means forming a score pocket on said playing field; a normally closed gateway means for preventing entry of a marble into said score pocket; and means operative by a marble on said playing field for opening said gateway.

11. In a game apparatus, in combination, a game board over which balls may roll, having holes through which balls are adapted to fall, a ball trap on said board, a pair of pivoted levers having ends directed away from the trap, means tending to maintain said ends divergent, and means on said levers adapted to be engaged by a ball to cause said ends to approach each other and close the trap.

12. The combination with a game board over which balls may roll, inclined from the horizontal and having a hole therein to receive a projected ball, of a device comprising a pair of bell crank levers pivotally mounted on opposite sides of the hole, said levers each having longitudinally and transversely extending legs and being movable to a position to block access to said hole.

HERBERT G. BREITENSTEIN.