May 6, 1952 H. E. GILLESPIE 2,595,669

DISK GAME APPARATUS

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FIG. 1.

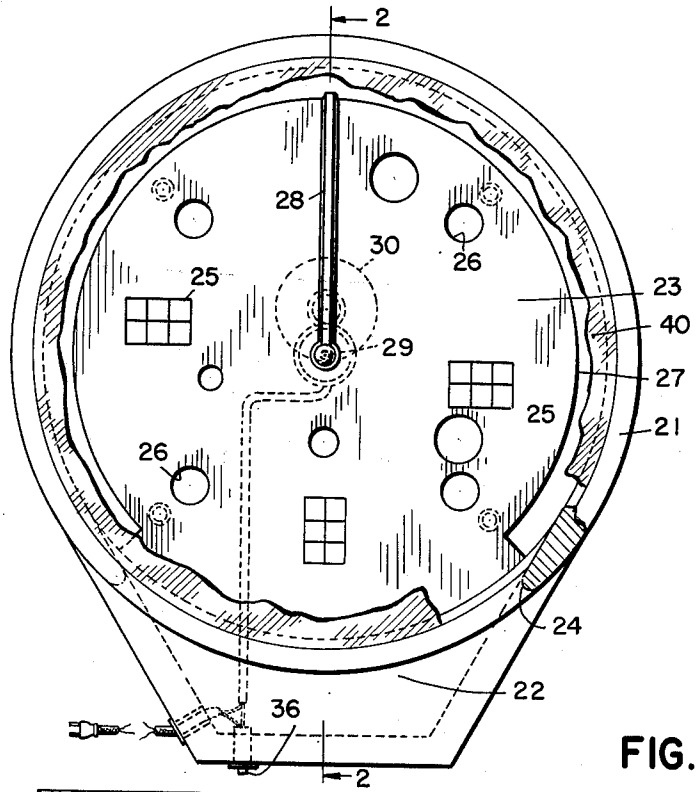
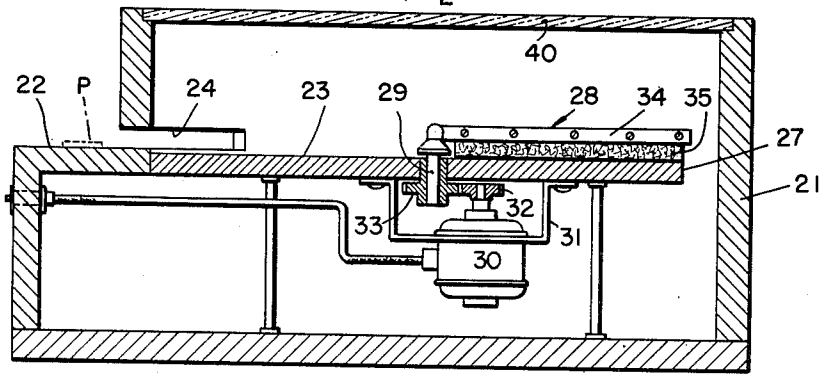


FIG. 2.



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DISK GAME APPARATUS

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FIG. 3.

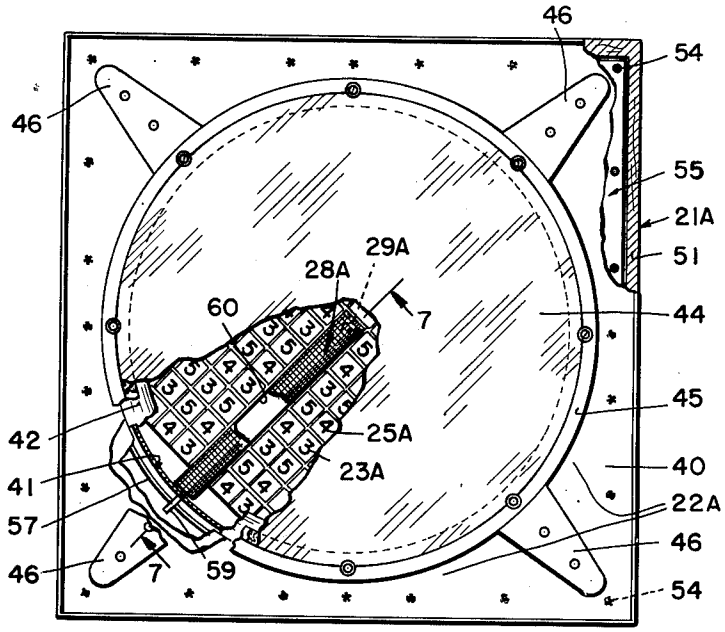
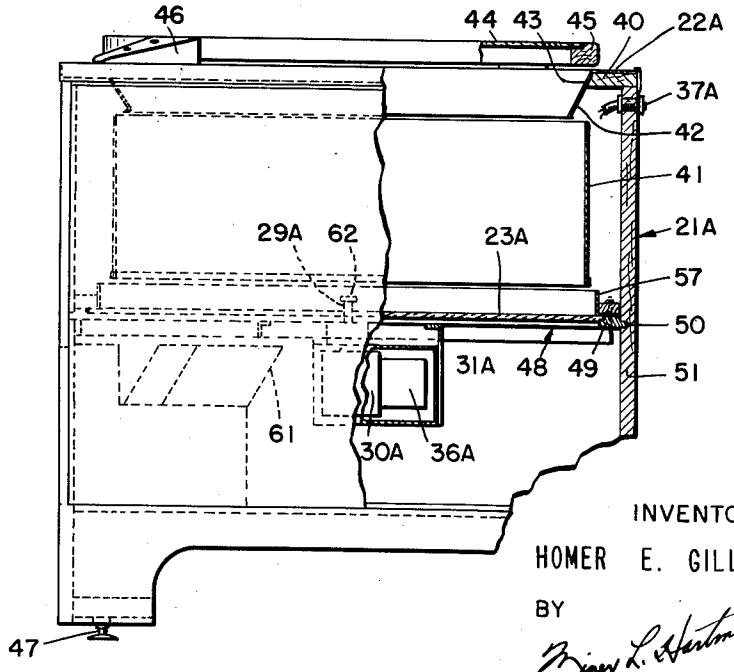


FIG. 4.



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DISK GAME APPARATUS

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FIG. 5.

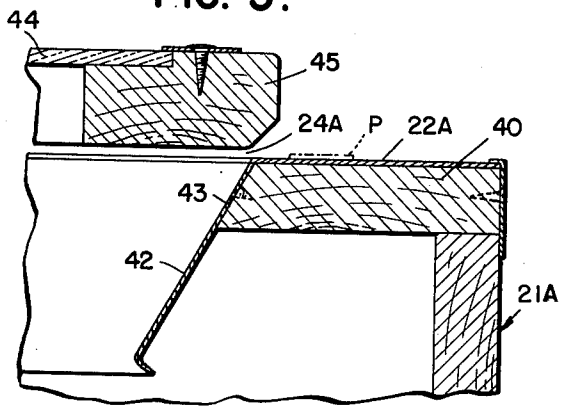


FIG. 6.

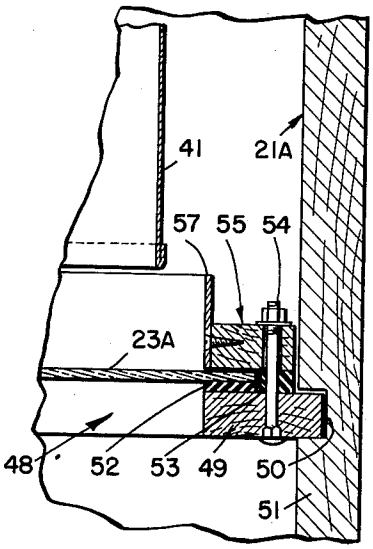


FIG. 7.

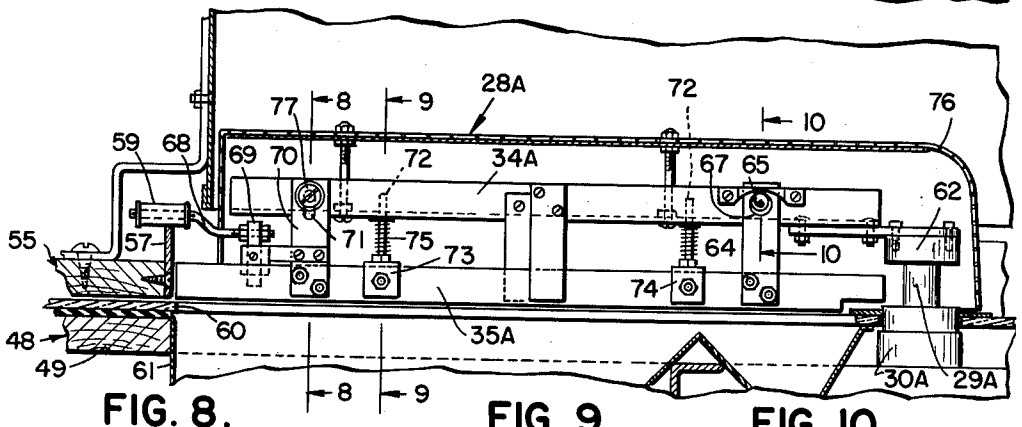


FIG. 8.

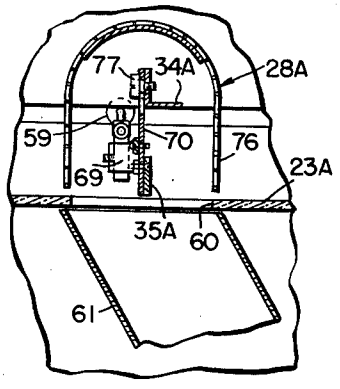


FIG. 9.

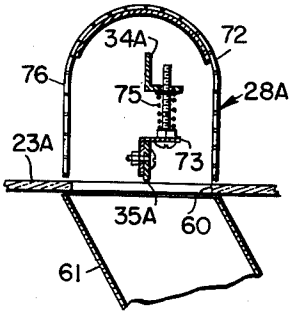
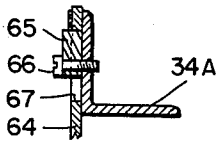


FIG. 10.



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UNITED STATES PATENT OFFICE

2,595,669

DISK GAME APPARATUS

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Application October 11, 1948, Serial No. 53,776

14 Claims. (Cl. 273—95)

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This invention relates to a skill game apparatus and in particular to one in which disc-like playing pieces, for example coins, are projected from a launching platform through the air on to a playing field having targets and hazards. Reference is hereby made to applicant's co-pending application, Serial Number 756,523, for a skill game.

One object of the invention is to provide an apparatus for games of skill in which coins or similar disc-like playing pieces are projected from a launching platform through the air on to a marked playing field having suitable targets and hazards. Another object of the invention is to provide an apparatus for a game of skill in which disc-like playing pieces are flicked by the finger from a launching platform on to a playing field at a lower elevation. Another object is to provide in a game apparatus means for sweeping the playing surface free from the playing pieces at the end of a game. A further object is to provide a commercial enclosed game of skill which is inexpensive to manufacture and requires no attendants.

These and other objects are attained by my invention which will be understood from the following description and the accompanying drawings in which:

Figure 1 is a top plan view with parts broken away showing a simple form of my invention;

Figure 2 is a cross-sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a top plan view of an alternative form of my invention, with parts broken away, to show the internal construction;

Figure 4 is a side elevational view of the game shown in Figure 3 with parts broken away;

Figure 5 is an enlarged fragmentary sectional view showing the details of the launching platform;

Figure 6 is an enlarged cross-sectional view showing the preferred resilient mounting for the playing field and the aligning track for the sweep;

Figure 7 is a cross-sectional view taken on the line 7—7 of Figure 3;

Figure 8 is a cross-sectional view taken on the line 8—8 of Figure 7;

Figure 9 is a cross-sectional view taken on the line 9—9 of Figure 7; and

Figure 10 is a cross-sectional view taken on the line 10—10 of Figure 7.

Referring to the drawings, particularly Figures 1 and 2, my game, in its simplest form, consists of a housing 21 which includes a horizontal launching platform 22 arranged at the side of and above the playing field 23 so that flat disc-

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like playing pieces P may be projected by a flick of the finger on to the playing surface through the slot 24 in the side wall of the housing. The playing field 23 is provided with suitable marked target areas 25 and may also be provided with hazards such as the holes 26 through the playing field through which the playing pieces may be lost. At the end of a game, the playing pieces may be removed from the playing surface 23, whose margin 27 is spaced away from the side walls of the housing 21, by a sweep 28 which is mounted for rotation on a central shaft 29, the sweep being long enough to sweep over the entire playing surface 23, which is preferably circular. The sweep 28 is rotated by a motor 30 mounted on the underside of the playing surface 23 by means of the brackets 31. The motor shaft is provided with a driving gear 32 operatively connected to the driven gear 33 which is attached to the central shaft 29. The sweep 28 consists of a radial horizontal arm 34 to which is attached a felt or rubber blade 35. After the playing pieces have been played and the game is completed, the playing pieces are swept off the playing field into the housing below, the motion of the sweeping arm being initiated through the switch 36 accessible on the outside of the housing 21 and electrically controlling the motor 30.

The housing 21 includes the transparent cover 40 which is preferably glass but which may be any closure material which permits a view of the playing field while preventing access thereto by the players' hands, for example, wire screen or netting.

In a modification of my invention shown particularly in Figures 3 to 10, a housing 21A consists of a rectangular box having a cover 40 which has a large circular opening 43 therethrough, over which is placed a transparent closure sheet 44 in a circular mounting 45, the latter being supported slightly above the top surface of the cover 40 by the corner support members 46. The outer margin of the cover 40, outside the circular mounting frame is preferably smooth and flat, forming the launching platform 22A from which the disc-like playing pieces P are projected through the opening or slot 24A between the circular frame 45 and the top surface of the cover 40. A cylindrical inner wall 41 is arranged above the playing field, and a truncated conical deflector 42 supported from the edge of the cover opening 43 directs the playing pieces on to the playing field if they fall short when launched from the launching platform 22A. The housing may be supported upon the floor, and is arranged to

be brought to a suitable level by means of leveling jacks 47 placed at the lower corners of the housing. The transparent closure sheet 44 over the opening in the cover may be glass, or wire netting or any other suitable closure material which will permit a view of the playing field but which will prevent access thereto by the player.

The housing is also provided with a horizontal partition member 48 which consists of an open center frame 49 adapted to slide in the grooves 50 in the side walls 51 of the housing 21A. The playing surface consists preferably of a plate 23A, preferably glass, upon which various kinds of targets 25A are marked. The plate 23A which constitutes the playing surface is adjustably mounted on the frame 49, being supported upon a sponge rubber gasket 52 and held in place by the bolts 54 extending through the frame 49 through the rubber washer 53 and through a track support frame 55. The sponge rubber gasket 52 provides a resilient mounting for the preferred glass playing field plate, and the compressible sponge rubber washer between the frame 49 and the frame 55 provides means for adjusting the level of the track 57 through the bolts 54.

The track support frame 55 has a circular central opening corresponding to the circular playing field. A track 57, preferably a sheet fiber strip, is attached to the inside edge of the frame 55 around the opening therethrough, upon which the outer end of the sweep 28A is supported through the roller 59 as will be further described.

The playing field 23A is provided with a radial slot 60 which connects below the playing surface with a collecting chute 61 for the playing pieces. The sweep 28A is mounted at one end on the hub 62 and arranged for rotation by the central shaft 29A which is operatively connected to the motor 30A supported on brackets 31A below the playing surface. Suitable electrical stopping and starting switching means 36A are provided in association with the motor so that the sweep may be rotated and stopped in a position directly over the slot 60 to cover said slot during the playing of the subsequent game. The sweep mechanism is set into operation through a manual push button 37A accessible from outside the housing 21A.

The sweep 28A consists of an arm 34A from which is suspended a blade 35A which is arranged to move with only a small clearance above the playing surface 23A. Near the hub, the blade 35A is supported on the sweep arm 34A by means of a link 64, there being provided an elongated hole 67 in the link which permits vertical lifting of the blade 35A. An off-center collar 65 is attached to the bolt 66 operating in the elongated hole 67 so that by the turning of the eccentric collar, the link 64 and attached blade 35A may be raised and lowered to provide a minimum amount of clearance for the blade 35A relative to the glass playing surface 23A. On the opposite or outer end of the arm 34A of the sweep 28A there is mounted a roller 59 which is adapted to roll on the edge of the track 57, the elevation of the axis of the roller being adjustable by means of the off-set roller supporting arm 68 which is mounted on the bracket 69 attached to the outer end of the blade. The outer link 70 and the attached screw 77 in the elongated hole 71, by which the blade 35A is supported by the arm 34A of the sweep permit the attached blade to move upwardly at times to a clearance greater than the minimum. The blade is thus arranged so that in the event that it is necessary for the blade to be raised slightly to avoid jamming when, for example, two playing pieces become superimposed on the playing field, the blade will be raised, being normally held down to the minimum clearance by the coil springs 75 on the pins 72 interposed between brackets 73 and 74 on the arm 34A and the blade 35A respectively. The sweep means is preferably covered by a semi-circular cover 76 which completely covers the sweep and extends over the slot, and thereby prevents interference with the playing pieces as they are projected on to the playing field.

The operation of my game will be apparent from the above description. The field may be marked or arranged in any suitable way for scoring or for hazards and any selected number of playing pieces may be projected on to the field as above described. After the game is completed, the playing pieces are removed from the field by the operation of the sweep which collects all of the playing pieces and pushes them into the chute, the sweep being stopped by means of the switch means 36A so as to completely cover the slot and chute.

The advantages of my game are its simplicity of operation requiring no attendants and not requiring mechanical methods of scoring, so that the details of the game and its scoring may be arranged as desired by the players. The playing field is inaccessible to the players so that there can be no irregularity or cheating. The scoring may be read directly from the position of the playing pieces on the marked playing surface.

I claim:

1. A skill game apparatus comprising a housing including a cover through which the playing field is visible; a horizontal playing field having targets; a horizontal stationary launching platform disposed a sufficient distance above said playing field and outside of said housing and forming a slit-like opening with said cover so that disc-like playing pieces may be trajected from said platform through the slit-like opening and through the air on to said playing field; and means for displacing the playing pieces from the playing field at the conclusion of a game.

2. A skill game apparatus comprising a housing including a transparent cover; a horizontal playing field having targets; a horizontal stationary launching platform disposed a sufficient distance above said playing field and outside of said housing and forming a slit-like opening with said cover so that disc-like playing pieces may be manually trajected from said platform through said slit-like opening and through the air onto said playing field; and horizontally disposed sweep means extending completely over the horizontal playing field for removing the playing pieces from the playing field at the conclusion of a game.

3. A skill game apparatus comprising a housing including a transparent cover; a horizontal playing field having targets; a horizontal stationary launching platform disposed a sufficient distance above said playing field and outside of said housing and forming a slit-like opening with said cover so that disc-like playing pieces may be trajected from said platform through said slit-like opening and through the air onto said playing field; means for displacing the playing pieces from the playing field at the conclusion of a game; said displacing means including a horizontally disposed sweep means operatively attached to a shaft extending through said playing field and extending completely over the horizontal

playing field; and means for turning said shaft to rotate said sweep.

4. A skill game apparatus comprising a housing including a transparent cover; a circular horizontal playing field having targets; a horizontal stationary launching platform disposed a sufficient distance above said playing field and outside of said housing and forming a slit-like opening with said cover so that disc-like playing pieces may be manually trajected from said platform through said slit-like opening and through the air on to said playing field; means for displacing the playing pieces from every part of the playing field at the conclusion of a game, said displacing means including a horizontally disposed sweep means extending completely over the playing field and operatively attached to a vertical shaft extending above said circular horizontal playing field at the center thereof; motor means for turning said shaft to rotate said sweep means; and switch means controllable from outside said housing for controlling said motor means.

5. A skill game apparatus comprising a housing including a transparent cover; a circular horizontal playing field having targets, said circular horizontal playing field having a radial slot adapted to receive playing pieces at the end of a game; a horizontal stationary launching platform disposed a sufficient distance above said circular horizontal playing field and outside of said housing and forming a slit-like opening with said cover so that disc-like playing pieces may be manually trajected from said platform through said slit-like opening and through the air on to said playing field; and horizontally disposed sweep means covering completely the playing field for removing the playing pieces from every part of the circular horizontal playing field into said radial slot at the conclusion of a game; and collecting means beneath said playing field adapted to collect the playing pieces swept off said playing field by said removing means.

6. A skill game apparatus comprising a housing including a transparent cover; a circular horizontal playing field having targets, and having a radial playing piece-receiving slot therethrough; a launching platform disposed a sufficient distance above said playing field and forming a slit-like opening with the cover so that disc-like playing pieces may be manually trajected from said platform through said slit-like opening and through the air on to said playing field; means for displacing the playing pieces from the circular horizontal playing field into said radial slot at the conclusion of a game; said displacing means including a horizontally swinging sweep means operatively attached to a vertical shaft extending above said circular horizontal playing field at the center thereof and adapted to close said radial slot when placed thereover and to prevent playing pieces from falling through the slot during the game; motor means for turning said shaft to rotate said sweep means; and switch means controllable from outside said housing for controlling said motor means to rotate said sweep means and to stop said sweep means over said radial slot.

7. In a skill game having a circular horizontally disposed playing field upon which disc-like playing pieces are deposited during the playing of the game; sweep means comprising a radial sweep arm mounted on a rotatable shaft positioned at the center of the circular playing field and adapted to be moved over the circular horizontal playing field, said sweep arm having roller means attached at its outer end; a track around the periphery of said playing field upon which track means said roller rolls; a contact bar supported below and by said sweep arm; and adjustable supporting means adapted to fix the minimum clearance between said contact bar and said playing surface.

8. In a skill game having a horizontally disposed circular playing field upon which disc-like playing pieces are deposited during the playing of the game; sweep means comprising a sweep arm mounted on a rotatable shaft positioned at the center of the circular playing field and adapted to be rotated over the circular playing field, said sweep arm having roller means attached at its outer end, a track means around the periphery of said playing field upon which track means said roller rolls; a contact bar suspended from said sweep arm; and means to fix the minimum clearance between said contact bar and said playing surface.

9. In a skill game having a horizontally disposed circular playing field upon which disc-like playing pieces are deposited during the playing of the game; sweep means comprising a sweep arm mounted on a rotatable shaft positioned at the center of the circular playing field and adapted to be rotated over the circular playing field, said sweep arm having roller means attached at its outer end; means to adjust the axial elevation of said roller means; a track means around the periphery of said playing field upon which track means said roller rolls; a contact bar suspended from said sweep arm; slotted link bar means between said sweep arm and said contact bar; and adjustable means on at least one of said link bar adapted to fix the minimum clearance between said contact bar and said playing surface.

10. In a skill game having a horizontally disposed circular playing field upon which disc-like playing pieces are deposited during the playing of the game, said circular playing field having a radial playing-piece-receiving slot which during the playing of said game is closed and into which at the end of the game the playing pieces are swept from the playing field; sweep means comprising a sweep arm mounted on a rotatable shaft positioned at the center of the circular playing field and adapted to be rotated over the circular playing field, said sweep arm having roller means attached at its outer end; means to adjust the axial elevation of said roller means; a track means around the periphery of said playing field upon which track means said roller rolls; a contact bar suspended from said sweep arm; slotted link bar means between said sweep arm and said contact bar; adjustable means on at least one of said link bars adapted to fix the minimum clearance between said contact bar and said playing surface; spring means acting between said contact bar and said sweep arm to normally hold said contact bar at the selected minimum clearance above said playing field; and a cover on said sweep means adapted to close said slot when said sweep means is placed thereover.

11. In a skill game of the type in which a disk-shaped playing piece is trajected on to a playing field, a playing field including targets; enclosure means for said playing field adapted to make said field inaccessible for tampering; and launching means for the playing pieces for said game, said launching means including a substantially horizontal stationary platform disposed outside of said enclosure adjacent said playing field at a sufficient distance thereabove and forming a slit-

like opening with the enclosure means so that the playing pieces may be trajected from said platform through the slit-like opening and through the air on to said playing field.

12. In a skill game of the type in which a disk-shaped playing piece is trajected on to a playing field, a playing field including targets; enclosure means for said playing field adapted to make said field inaccessible for tampering, including a cover and supporting means for said cover, said supporting means being provided with slit-like apertures below said cover adapted for the transfer therethrough of the playing pieces; and launching means for the playing pieces for said game, said launching means including a substantially horizontal stationary platform disposed adjacent said slit-like apertures in the cover supporting means and outside of said enclosure, said slit-like apertures being disposed at a sufficient height above said playing field so that the playing pieces may be trajected from said platform through the slit-like apertures and through the air on to said playing field.

13. In a skill game of the type in which a disk-shaped playing piece is trajected on to a playing field, a playing field including targets; enclosure means for said playing field adapted to make said field inaccessible for tampering, including walls and a transparent cover supported by supporting means slightly above the top edge of the walls and forming a slit-like opening with said walls; and a horizontal stationary launching platform completely surrounding the enclosure means and disposed above the playing field adjacent to said slit-like opening and outside of the enclosure means and adapted to permit playing pieces to be projected from said platform through the slit-like opening and through the air upon the playing field.

14. In a skill game of the type in which a disk-shaped playing piece is trajected on to a playing field, a playing field including targets; enclosure means for said playing field including walls extending vertically from said playing field and a transparent cover supported by supporting means above said walls and forming a narrow slit-like opening with said walls; and a horizontal stationary launching platform completely surrounding said enclosure means and disposed immediately adjacent to the narrow slit-like opening and above the playing field and adapted to permit playing pieces to be trajected from said launching platform through the narrow slit-like opening and through the air upon the playing field.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
890,897	Forrest	June 16, 1908
1,008,898	Fulton et al.	Nov. 14, 1911
1,190,488	Verral	July 11, 1916
1,706,271	Williams	Mar. 19, 1929
1,806,274	Williams	May 19, 1931
1,866,821	Rather	July 12, 1932
2,248,316	Weber	July 8, 1941