

Dec. 21, 1948.

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2,456,725

INCLINED RAIL BALL ROLLING CHANCE DEVICE

Filed Jan. 16, 1948

2 Sheets-Sheet 1

FIG. 1.

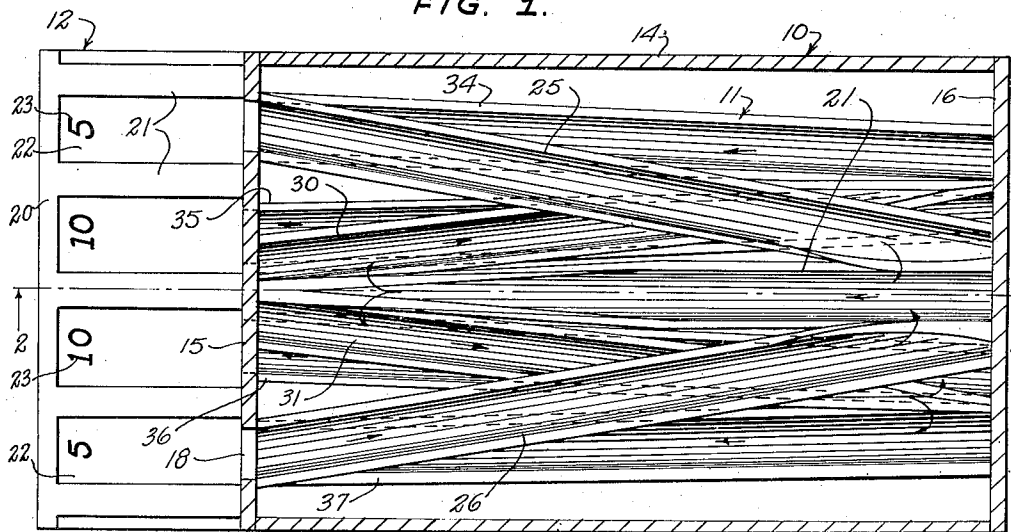
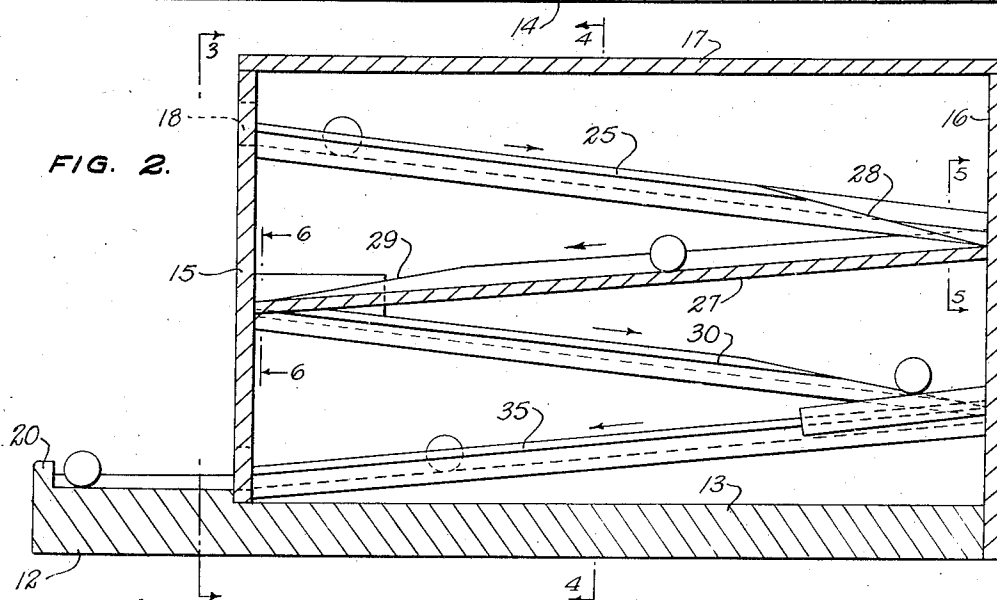


FIG. 2.



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FIG. 3.

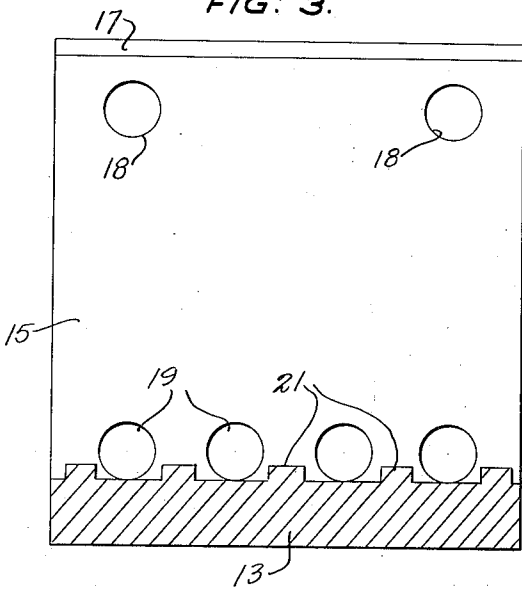


FIG. 5.

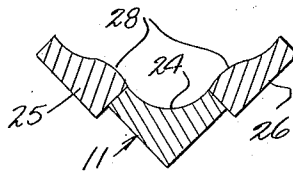


FIG. 4.

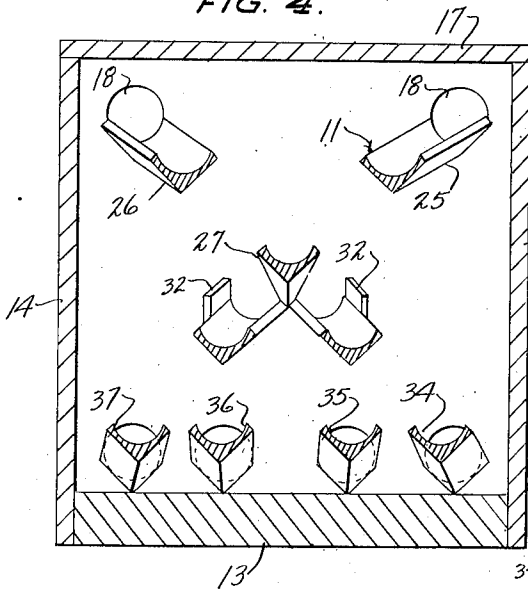


FIG. 6.

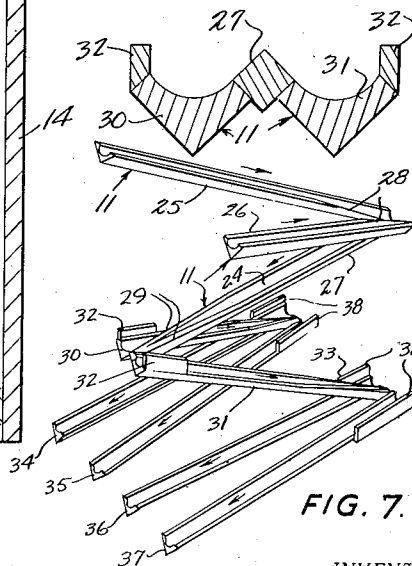


FIG. 7.

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UNITED STATES PATENT OFFICE

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INCLINED RAIL BALL ROLLING CHANCE
DEVICE

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Application January 16, 1948, Serial No. 2,728

5 Claims. (Cl. 273-120)

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This invention relates to improvements in games, and more particularly to an improved apparatus for a game of chance played with movable spherical game pieces or balls.

It is among the objects of the invention to provide an improved apparatus for a game which may be played by a single player, or by two or more players at the same time, to produce competitive scores, which apparatus produces scores based primarily on the element of chance rather than the skill of the players, and is thus particularly well adapted for amusement and entertainment, which embodies a portable apparatus of small size and light weight, simple and inexpensive to manufacture, neat and attractive in appearance, and simple and easy to operate.

Other objects and advantages will become apparent from a consideration of the following description in conjunction with the accompanying drawings, wherein:

Figure 1 is a horizontal cross-section of a game apparatus illustrative of the invention;

Figure 2 is a vertical cross-section taken substantially on the line 2-2 of Figure 1;

Figure 3 is a transverse cross-section taken substantially on the line 3-3 of Figure 2;

Figure 4 is a transverse cross-section taken substantially on the line 4-4 of Figure 2;

Figure 5 is a transverse cross-section on a somewhat enlarged scale of a structural detail of the apparatus taken substantially on the line 5-5 of Figure 2;

Figure 6 is a transverse cross-section on an enlarged scale of a structural detail taken substantially on the line 6-6 of Figure 2;

Figure 7 is a diagrammatic perspective view of the internal components of the game apparatus.

With continued reference to the drawings, the apparatus comprises a rectangular enclosure, generally indicated at 10, a plurality of grooved, inclined rails or chutes, generally indicated at 11, mounted in the enclosure and a multiple-compartment receptacle, generally indicated at 12, disposed at one end of the enclosure at the bottom thereof.

The enclosure 10 comprises a base or bottom wall 13, two side walls 14, a front end wall 15, a rear end wall 16 and a top wall or cover 17. The front wall is provided in the upper portion thereof with two spaced-apart openings 18, preferably of circular form and disposed in the upper corner portions of the front wall and with four lower openings 19, also preferably of circular

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form and substantially equally spaced apart immediately above the upper surface of the bottom wall or base 13.

The multiple-compartment receptacle 12 may conveniently be formed by extending the base 13 forwardly beyond the front wall 15, as clearly illustrated in Figure 2, and providing an upwardly-extending flange or ridge 20 along the forward end thereof and spaced-apart, substantially parallel ridges 21 extending from the flange 20 to the front wall 15 and providing partitions dividing the receptacle into separate compartments 22, each of which is aligned with and communicates with a respective lower opening 19 in the front wall 15. The compartments 22 are preferably provided with markings or score indications 23 indicating the point value of the game pieces received in the various compartments of the multiple-compartment receptacle.

The rails or chutes 11 are preferably of generally triangular cross-sectional shape and each rail has a rounded groove 24 in the upper surface thereof to provide guides for the spherical game pieces as the game pieces travel longitudinally of the rails. It is to be understood, however, that rails of other specific shapes may be provided without in any way exceeding the scope of the invention. It is also to be understood that the enclosure, the rails and the receptacle may be formed of any suitable material, such as wood, synthetic resin plastic, glass, metal or paper, without exceeding the scope of the present invention.

The various rails 11 are arranged in the enclosure 10 in a manner to provide several sets of rails at various successive levels in the enclosure, as is particularly illustrated in Figures 2 and 7.

In the arrangement illustrated, the rails are arranged in four different sets at successively different levels with the rails in successively lower sets inclined in opposite directions.

The first or uppermost set contains two rails 25 and 26, the upper ends of which are secured to the inner side of the front wall 15 of the enclosure immediately below the front wall upper openings 18, as clearly illustrated in Figure 4. These two rails are inclined downwardly from the openings 18 and converge together at the rear wall 16 to which their lower ends are attached.

The second or next lower set comprises a single rail 27, the upper rearward end of which is attached to the inner side of the rear wall 16 immediately below the lower ends of the two rails 25 and 26, the inner edges of the rails 25 and 26 being beveled or cut away, as shown at 28 in

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Figures 2 and 7, so that a ball running down either of the rails 25 or 26 will drop from the lower end of either of these rails onto the upper end of the single rail 27 and into the top groove 24 of the rail 27.

The rail 27 inclines forwardly and downwardly to the inner surface of the front wall 15 substantially at the center thereof and has both of its edges cut away or beveled near its lower end, as shown at 29, so that a ball traveling down the rail 27 will roll off of the lower end of the rail at one side or the other in an unpredictable manner.

The next lower or third set of rails contains two rails 30 and 31 which incline rearwardly and downwardly in a diverging manner to the inner face of the rear wall 16 near the bottom thereof. Each of these rails 30 and 31 has its outer edge extended upwardly at the upper end thereof, as indicated at 32, to provide guards or shields to keep a ball falling from the lower end of the rail 27 from running over the outer edge of the rail 30 or 31 into which it drops. The edges of the two rails 30 and 31 are cut away or tapered at the lower end of the rails, as indicated at 33, in the same manner in which the rail 27 is cut away at 29, so that a ball rolling down either rail 30 or 31 may fall to either side of such rail at the lower end thereof in an unpredictable manner.

The fourth or lowermost set of rails comprises two pairs or four rails 34, 35, 36 and 37. The upper ends of the two rails 34 and 35 are positioned at the inner face of the rear wall 16 of the enclosure immediately below the lower end of the rail 30, while the upper ends of the two rails 36 and 37 are positioned at the inner face of the rear wall 16 immediately below the lower end of the rail 31. The outer edges of the rails 34, 35, 36 and 37 are extended upwardly, as indicated at 38, in the same manner in which the rails 30 and 31 are extended upwardly at 32 to provide guards or shields to keep balls dropping from the lower ends of the rails 30 and 31 from overrunning the outer edges of the corresponding pairs of rails 34, 35 and 36, 37. The lower forward ends of the rails 34, 35, 36 and 37 are attached to the inner surface of the front wall 15 of the enclosure immediately below respective lower openings 19 so that balls rolling down these rails of the lower set will pass through the openings 19 and into the corresponding compartments 22 of the receptacle 12, where they are scored according to the point value of the various compartments of the receptacle.

The passage of a spherical game piece or ball from one of the openings 18 to one of the receptacle compartments 22 is thus entirely a matter of chance and the scores are accumulated in an unpredictable manner.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are, therefore, intended to be embraced therein.

I claim:

1. Game apparatus comprising sets of inclined grooved rails arranged in oppositely inclined directions so that the lower ends of the rails of one

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set communicate with the upper ends of the rails of the next lower set with the lower end of a single rail in simultaneous communication with the upper ends of a pair of rails disposed immediately below it, whereby a ball may be discharged from said single rail to either one of said pair of rails, and receptacle means having respective compartments communicating with the rails of the lowermost set of rails for receiving balls from said lowermost rails, said receptacle means providing scoring values for balls discharged from the various rails of said lowermost set.

2. Game apparatus comprising a rectangular enclosure, a plurality of grooved inclined rails in said enclosure, and a multiple receptacle at one end of said enclosure and at the bottom thereof, said rails comprising several sets at different respective levels in said enclosure with the rails of successive sets inclined in opposite directions and the lower end of one rail of one set communicating with the upper ends of two rails of the set immediately below said one set, said enclosure having openings therein for feeding spherical game pieces to the rails of the uppermost set and for discharging such game pieces from the rails of the lowermost set into said receptacle.

3. Game apparatus comprising a rectangular enclosure, a plurality of grooved inclined rails in said enclosure, and a multiple receptacle at one end of said enclosure and at the bottom thereof, said rails comprising several sets disposed at different respective levels in said enclosure with the rails of successive sets inclined in opposite directions and each successively lower set containing double the number of rails contained in the set immediately above it and with a single rail in any set above the lowermost set in communication at its lower end with the upper ends of a pair of rails in the next lower set, said enclosure having openings therein for feeding spherical game pieces to the rails of the upper set and for discharging such game pieces from the rails of the lowermost set into said receptacle.

4. Game apparatus comprising a rectangular enclosure, a plurality of grooved inclined rails in said enclosure, and a multiple receptacle at one end of said enclosure and at the bottom thereof, said rails comprising four different sets disposed at different respective levels in said enclosure with the rails of successive sets inclined in opposite directions and with the uppermost set containing two rails, the next lower set a single rail, the third set two rails, and the lowermost set four rails, and with both rails of said uppermost set communicating at their lower ends with the upper end of the single rail of said next lower set, the lower end of said single rail communicating with the upper ends of both rails of said third set, and both rails of said third set each communicating at its lower end with the upper ends of two of the four rails of said lowermost set, said enclosure having two upper openings through which spherical game pieces may be fed to the upper ends of the two rails of said uppermost set and four lower openings through which such game pieces may be discharged from the lower ends of the four rails of said lowermost set into said multiple receptacle.

5. Game apparatus comprising a rectangular enclosure, a plurality of grooved inclined rails in said enclosure, and a multiple receptacle at one end of said enclosure and at the bottom thereof, said rails comprising four different sets

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disposed at different respective levels in said enclosure with the rails of successive sets inclined in opposite directions and with the uppermost set containing two rails, the next lower set a single rail, the third set two rails, and the lowermost set four rails, and with both rails of said uppermost set communicating at their lower ends with the upper end of the single rail of said next lower set, the lower end of said single rail communicating with the upper ends of both rails of said third set, and both rails of said third set each communicating at its lower end with the upper ends of two of the four rails of said lowermost set, said enclosure having two upper openings through which spherical game pieces may be fed to the upper ends of the two rails of said uppermost set and four lower openings through

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which such game pieces may be discharged from the lower ends of the four rails of said lowermost set into said multiple receptacle, and said receptacle having four separate compartments communicating respectively with the lower ends of the four rails in said lowermost set of rails.

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