Aug. 1, 1950 J. KELLINGER ET AL 2,516,997

PIVOTED TOKEN RELEASING TARGET

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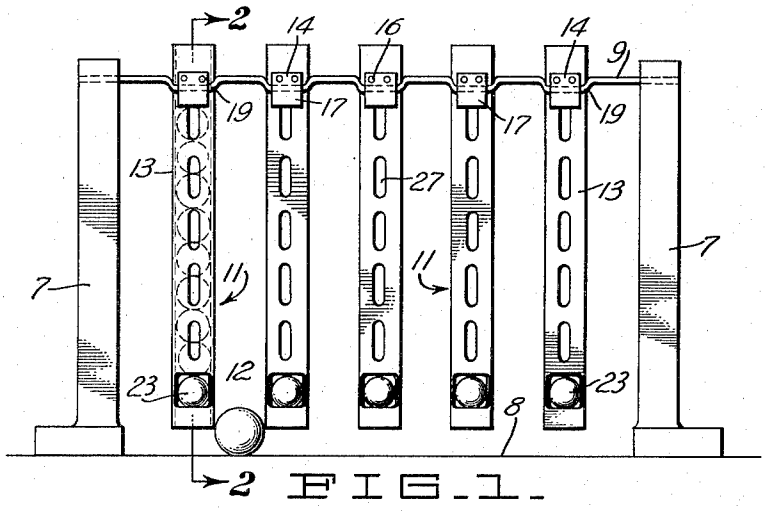


FIG. 1.

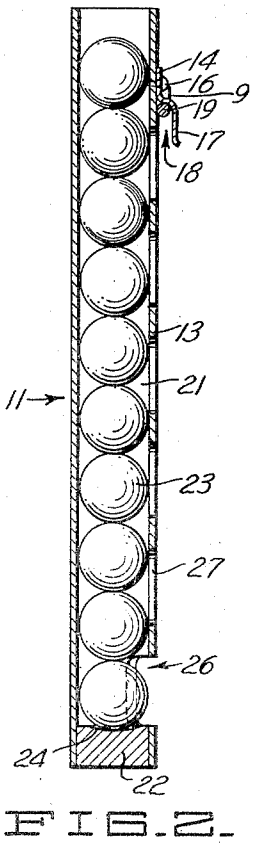


FIG. 2.

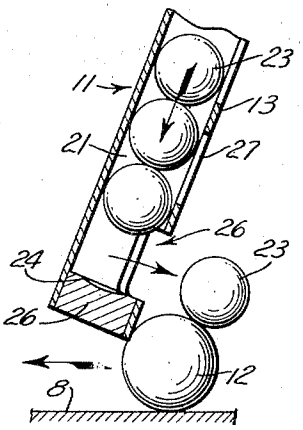


FIG. 3.

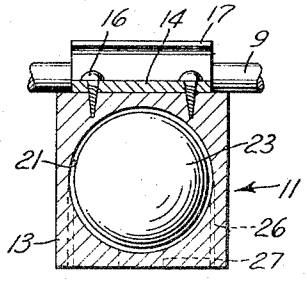


FIG. 4.

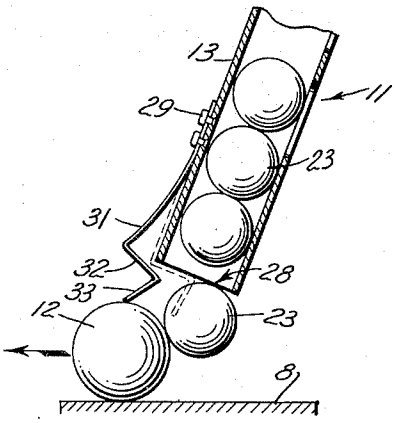


FIG. 5.

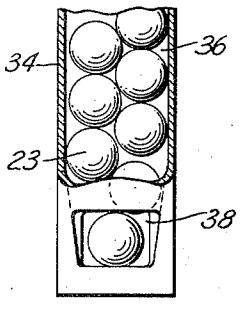


FIG. 6.

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PIVOTED TOKEN RELEASING TARGET

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2 Claims. (Cl. 273—127)

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This invention relates to games of skill, of the character in which missiles are cast or otherwise projected toward target objectives, and constitutes an improvement over the structure shown and described in the prior application of John Kellinger, Serial No. 676,023, for Game Apparatus, now abandoned.

An object of the invention is to provide game apparatus of the character described in which the target element serves as a container for prize elements or tokens successively deliverable in predetermined amounts when the target element is properly struck by the missile.

Another object of the invention is to provide, in game apparatus of the class referred to, a target element provided with means whereby, at all times, the amount of prize elements or tokens contained in the target element can be ascertained from a distance by the player.

A further object of the invention is to provide, for game apparatus, a target element having therein a reservoir for holding a stack of token pieces and a discharge port through which the token pieces may be discharged when the target is struck by a missile, the reservoir being so arranged that a greater number of token pieces may be accommodated in a given vertical distance than if the pieces were collimately stacked, and yet obstructions to flow of the pieces from the reservoir through the discharge port, caused by coactive wedging of two or more pieces between opposed side wall portions of the reservoir, is effectively prevented.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawings accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to the drawing:

Figure 1 is a front elevational view of a game in which target elements embodying one form of the present invention are included.

Figure 2 is a vertical sectional view, to an enlarged scale of one of the target elements. The plane in which the view is taken is indicated by the line 2—2 of Figure 1.

Figure 3 is a view similar to Figure 2 showing the position of the target element when struck by the missile to effect release of a token or prize piece.

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Figure 4 is a horizontal sectional view of one of the target elements shown in Figure 1.

Figure 5 is a view similar to Figure 3 showing a modified form of release apparatus.

Figure 6 is a front elevational view, partly in vertical section, of a target element modified to provide a reservoir capable of holding a maximum number of token or prize pieces per unit of vertical height.

In Figure 1 is illustrated a complete game apparatus comprising one or more standards 7 adapted to be set upon a floor or other playing surface 8 and supporting, in elevated and parallel relation to the surface 8 an axle 9 or similar member from which one or more target elements, generally indicated by the numeral 11, may be suspended in such positions that they may be struck by a missile 12 projected through the air or along the surface 8. Each of the target elements, in its preferred form, comprises an elongated body 13 provided with means for attachment to the axle 9 which, in this case, comprises a clip 14 secured by screws or nails 16, or in any other suitable manner, to a vertical surface of the body and provided with a leg portion 17 spaced from the body surface to form a downwardly opening hook recess 18 for receiving the axle 9 and providing a pivot mounting about which the target element may pendently oscillate. One of several different means may be employed for maintaining the target elements in relatively spaced relationship along the axle 9 but the method shown is preferable in which the axle is bent to form radially offset portions 19 each of which is of sufficient axial length to receive and journal one of the target elements. By means of the structure just described, the target elements may be attached to or detached from the axle or rearranged thereon as desired.

Figure 2 comprises a vertical sectional view through one of the target elements taken in a plane trans-axially of the axle 9 and shows that the target element is provided with a longitudinally extending chamber 21 open at the top and closed at the bottom by an integral portion of the body 13 or by means of a plug 22, as shown, which is cemented or otherwise secured in place. The chamber 21 is of sufficient cross-sectional size to receive token or prize pieces herein shown as balls 23 which may be inserted into the chamber through the open top thereof and which are held in a vertical stack, the lowermost ball resting in a slight depression 24 formed in the upper surface of the chamber bottom or plug 22 and in alignment with a dis-

charge aperture 26 formed in the side wall of the target element and facing the forward side of the latter confronting the point from which the missile is projected or thrown. The aperture 26 is of sufficient size to permit passage of a token piece 23 therethrough and the depression 24 serves to retain the lowermost piece, when the target element is at rest, against being forced, by the superposed weight of the remaining pieces in the stack, through the discharge aperture 26. The lowermost token piece in the stack may be dislodged however as shown in Figure 3. When the missile 12 is forcibly projected toward and strikes a target element, the latter will react to swing rearwardly about its pivot axis. However, the inertia of the lowermost token piece will cause the latter to be thrust toward the discharge aperture 26 and, when a comparatively small degree of radial displacement of the token piece relative to the vertical axis of the stack exists, the penultimate token piece under its own or the combined weights of the remaining pieces in the stack will crowd behind the displaced token piece and will forcibly eject the latter through the discharge aperture. As soon as the token piece is ejected the remaining pieces will gravitationally descend until the now lowermost piece engages and rests in the depression 24. This action will occur every time that the target element is struck by the missile provided, of course, that one or more token pieces are present in the chamber 21 and the force of the blow is sufficient to cause dislodgement of the lowermost token piece. In order to at all times acquaint the players with the number of token pieces contained in the chamber 21, spaced vertically elongated apertures 27 are provided through which the vertical extent of the stack of game pieces may be readily seen. A single elongated slot may be substituted for the series of apertures 27 but the latter construction is preferable since it lends structural strength to the target element side wall which would be impaired in the single slot construction.

In Figure 5 is shown a modified form of the invention wherein the target element chamber 21 is provided with an open bottom forming a discharge aperture 28 through which successive of the token pieces 23 may pass from the chamber. Secured by rivets 29, or other suitable means, to the rear side wall portion of the target element body and at a point thereon spaced upwardly from the discharge aperture 28, is a leaf spring 31 having an angularly bent dogging portion 32 normally underlying the lower end of the target element and extending for a substantial distance across the discharge aperture, a downwardly bent extension of the dogging portion 32 forming a trigger 33. When a missile 12 forcibly projected toward the target element strikes the trigger 33, the spring 31 will be flexed rearwardly as shown, due to the fact that the inertia of the target element will not permit the latter to start swinging rearwardly until sufficient flexure stress has been stored in the spring to overcome the inertia, with the result that the dogging portion 32 will be withdrawn from below the discharge aperture 28 and one or more token pieces 23 may drop to the playing surface from the chamber 21. In explanation of the latter statement it will be seen that the degree of flexure of the spring 31 depends upon how forcefully the latter is struck by the missile 12 with the result that a comparatively light blow may not withdraw the dogging portion 32 sufficiently to release the lowermost token piece of the stack, while a very hard blow may cause the spring to flex so severely that, before it can recoil, two or more of the token pieces will have dropped from the chamber. Although the target element of Figure 5 has been indicated as being pivotally supported, it will operate equally as satisfactorily if held in a rigid condition. Any structure for accomplishing this result may be employed and is not illustrated since persons skilled in the art are fully aware of their construction.

When the token pieces, in the forms of the invention illustrated in Figures 2 and 5, are arranged in single file in their chambers, only a limited amount of the pieces may be accommodated in a unit vertical length of the chamber and consequently the chamber may require frequent recharging depending on the length of time that is required to exhaust the chamber. In Figure 6 is shown a modified form of target element 34 in which the chamber 36 is horizontally enlarged to hold a plurality of vertically arranged columns of token pieces 23. The latter token pieces bear a distinct relationship to the horizontal width of the chamber 36 in that, when the pieces are in the chamber and engaging the side walls thereof the pieces of one column will lie in staggered relation to the pieces of an adjacent column and this staggering should be equivalent to one-half of the vertical dimension of the uniformly-sized token pieces. In this way, a line drawn through the centers of adjacent pieces in opposite columns will not so nearly approach rectangularity with the vertical side wall surface of the chamber that bridging and consequent jamming of two token pieces, as they descend, between opposed points on the chamber side wall will not occur and free movement of successive token pieces toward the position opposite the discharge port 27 will be assured. This particular construction of the target element permits the chamber to hold considerably more token pieces than the single file type and consequently the game may proceed over a longer period without the necessity of interruption to recharge the chamber with token pieces.

Numerous modifications in form and construction of the game apparatus will become apparent to those skilled in the art from the foregoing disclosure and it is not intended that the invention be limited to the specific proportions and makeup of the parts illustrated as design modifications and material substitutions may be made without departing from the spirit of the invention. For instance, it is obvious that the target elements 11 may be constructed of transparent material, such as moldable synthetic resin, so as to render visible at all times the token piece contents of the chambers. This will of course obviate the need for the sight openings 27. It is also within the scope of the invention to substitute for the spherical token pieces shown, others of cylindrical or circular disk form, only slight modification of the cross-sectional shape of the chamber 21 being necessary to accommodate these forms.

We claim:

1. Game apparatus comprising a pivotally mounted target element having a vertically elongated chamber therein and provided in a lower portion thereof with a horizontal opening discharge port, means forming part of said target element and traversing said chamber to form an abutment adjacent said discharge port, a plural-

ity of token pieces arranged in vertically stacked relation in said chamber, the lowermost one of the token pieces in said stack engaging said abutment to be positioned by the latter in substantial alignment with said discharge port, and said lowermost one of the token pieces being releasable to pass from the chamber through said discharge port, upon engagement of the target element with a forcibly projected missile to effect relative movement between said target element and said lowermost token piece.

2. Game apparatus comprising a target element mounted for pivotal movement and having a vertically elongated chamber therein and provided in a lower portion thereof with a discharge port disposed normal to the axis of said chamber, said target element further having a bottom portion provided with a depression forming a surface of said chamber and positioned adjacent said discharge port, a plurality of token pieces arranged in vertically stacked relation in said chamber, the lowermost one of the token pieces

in said stack resting in said depression for positioning in substantial alignment with the discharge port, and said lowermost one of the token pieces being releasable from said depression, to pass from said chamber through said discharge port upon the target element being forcibly struck by a missile to impart pivotal movement to said element.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,136,153	Martineau	Apr. 20, 1915
1,251,481	Cuthbert	Jan. 1, 1918
1,390,789	Jacobs	Sept. 13, 1921
1,573,645	Rogers	Feb. 16, 1926
2,230,814	Roth	Feb. 4, 1941