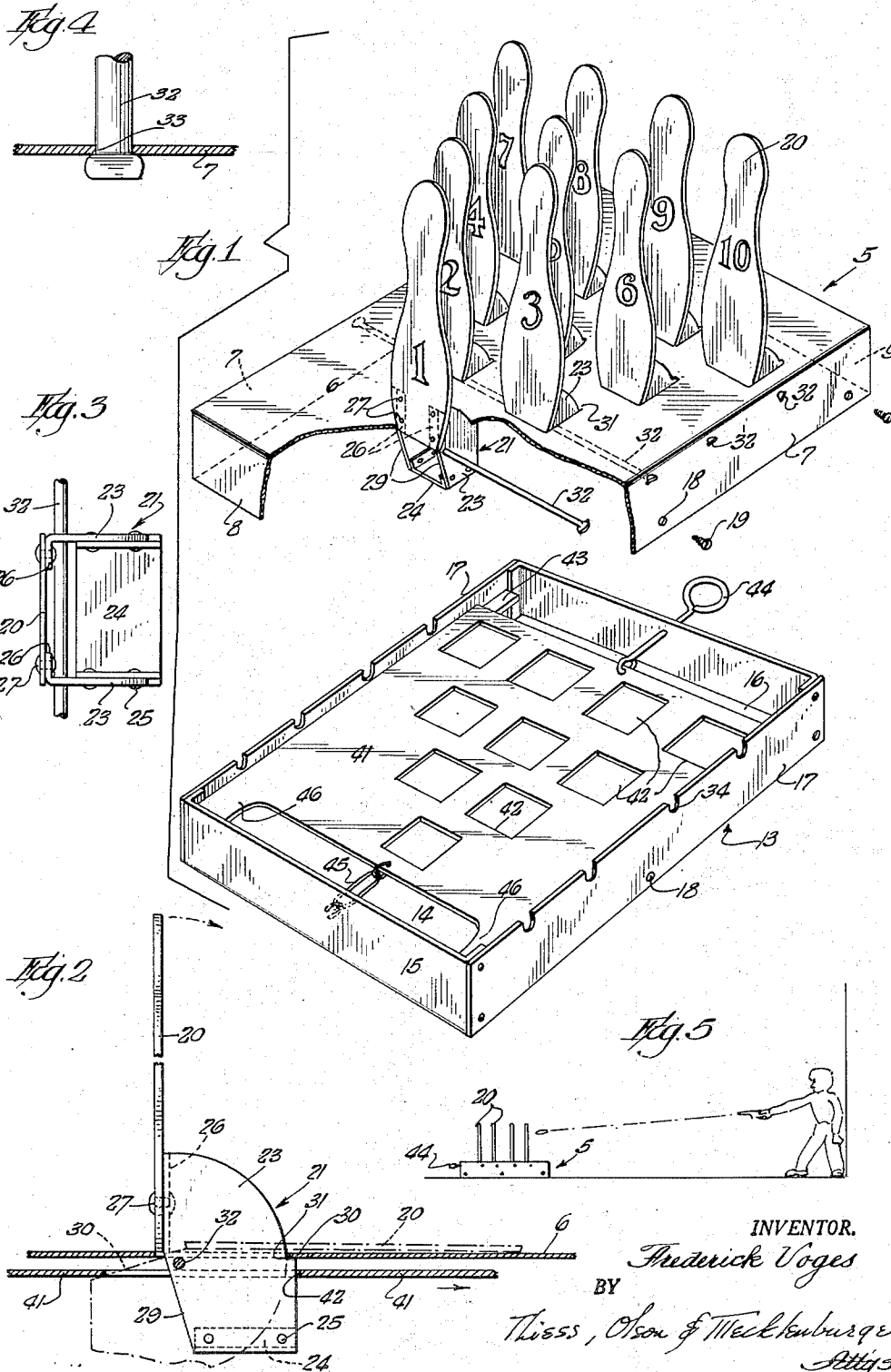


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TOY TENPIN GAME

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TOY TENPIN GAME

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This invention relates to a game. In particular it has reference to a simulated game of tenpins in which the pins are normally supported erect, but are adapted to be tipped from a vertical to a horizontal position upon being struck by a missile.

One of the principal objects of the invention is to provide a game in the nature of a toy, and therefore suited to the pleasure of a child, although the same is such as to lend itself to the amusement of adults as well, the toy comprising a plurality of tenpins hingedly mounted on a base so that one or more thereof may fall from an erect to a supine position when struck by a projectile or ball.

Another object is to provide a game generally as aforesaid, including a cam element secured to each tenpin and a cam-operating member for restoring all fallen pins to normal simultaneously.

Still further objects are to provide a simulated bowling game yielding many of the pleasures and excitement of its real counterpart, but adapted for indoor use in a small room, which is simple and hence foolproof in construction and operation, which is capable of operation by a very young child, is noninjurious, and may be played solo or competitively.

In the drawings, which show one embodiment of my invention:

Fig. 1 is an exploded perspective view of the game;

Fig. 2 is a detail in side elevation of one of the tenpins and its relationship to other parts;

Fig. 3 is a plan view of one of the tenpins and its shaft;

Fig. 4 is a detail of one end of a shaft supporting the tenpins; and

Fig. 5 depicts the game in use.

Referring to Fig. 1, the device comprises a support, including an upper open-bottomed, box-like structure 5 of sheet metal, cardboard, or other suitable material, having a top 6, sides 7-7, and ends 8 and 9, together with an interfitting open-top, box-like structure 13 of like material, and having a bottom 14, ends 15 and 16, and sides 17-17. Top part 5 and bottom part 14 may each be folded from a single blank and joined at the corners, as shown particularly in connection with part 14. Apertures 18 and self-tapping screws 19 may be used to unite the top and bottom parts, the top part fitting snugly over the bottom part.

Disposed erect above the top 6, and in the array of conventional tenpins, are the simulated tenpins 20 of thin, flat form and of any suitable material, e. g., plywood or metal. Each tenpin is provided with a supporting member 21, best seen in Figs. 2 and 3, of U-form, the sides 23 being spaced apart by a bridge 24 riveted thereto at 25, and the sides 23 being intumed to form flanges 26 secured to

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the tenpin 20 by rivets 27. The sides 23 pass through and are movable within pairs of slots 31-31 in the top 6, and there is provided a shaft 32 for each transverse row of tenpins 20 passing through apertures in the sides 23. At their ends the shafts 32 are supported in apertures 33 in the sides 7-7, the abutting sides 17-17 having U-shaped notches 34 to clear the same. The ends of the shafts may be flattened after assembly (Fig. 4) to prevent dislodgment thereof.

In view of the foregoing, it will be noted that each tenpin 20 is independently pivotally mounted with respect to the top 6 in order that each thereof, when struck, may fall from the erect position, shown in full lines (Fig. 2), to the supine position, represented by dot-and-dash lines. Sides 23 are arcuate, as shown, about the center line of the shaft 32 in order to clear through the slots 31. At their lower part, the sides 23 are sloped downwardly and rearwardly to provide camming surfaces 29 whose function will be explained, and there is a pair of shoulders 30 engageable against the underside of the top 6 to limit the extent to which the tenpins 20 may be moved counterclockwise upon resetting thereof.

To restore fallen tenpins to normal or erect position, the bottom part 13 supports and encloses a cam operator or cradle 41 of thin, flat material having a plurality of rectangular openings 42 each adapted to fit over a member 21 (Fig. 2), the cradle 41 being slidably supported on gibs 43 attached to the sides 17-17 (Fig. 1). For operating the cradle 41 to restoring position, a looped handle 44 is secured at one end thereof, retraction of the shutter to normal being effected by a spring or elastic band 45. End 9 is suitably slotted to clear the handle 44. Legs 46 limit return movement of the cradle.

In operation, the device is placed on the floor or table, and the player will throw or shoot a missile in the direction of the tenpins 20 (Fig. 5), the primary desideratum being to score a strike, i. e., all pins knocked down, or failing in that, to score a spare, i. e., less than all pins knocked down. In this connection it will be understood that if number 1 pin is struck, the remaining pins will fall therewith; or if, say, number 6 is struck, that pin and numbers 9 and 10 will fall. Stated otherwise, the game takes on all the features of conventional alley bowling, including the standard scoring system thereof. After a player has had his turn, the ring 44 is pulled outwardly to move the cam operator 41 in the direction of the arrow (Fig. 2), whereupon the forward edges of each opening 42 will move along the sloping camming edge 29 of the fallen members 21 to rotate the latter about the shafts 32 and to restore the fallen pins to normal upright position. Such resetting operation

is effective and rapid, the cam operator 41, upon release of handle 44, resuming its forward position through the medium of the resilient member 45.

From the foregoing it will be comprehended that I have provided a novel and interesting game, capable of entertaining children and adults alike, which requires only a limited playing space, is simple, and inexpensive to manufacture.

Without further elaboration, the foregoing will so fully explain the gist of my invention that others may, by applying current knowledge, readily adapt the same for use under varying conditions of service without eliminating certain features which may properly be said to constitute the essential items of novelty involved, which items are intended to be defined and secured to me by the following claims:

I claim:

1. A bowling game toy comprising an open-top box-like lower part and an open-bottom, box-like upper part adapted for assembly therewith with their edges overlapping to form a complete box, the top of said box having a plurality of pairs of slots therein, a group of simulated tenpins, erect on the top of said box and in conventional array, a plurality of shafts extending transversely between opposite sides of said box top, there being one shaft for each transverse row of tenpins, a U-shaped cam member having a downwardly and rearwardly sloped cam surface at the front thereof secured adjacent the base of each tenpin, the legs of the U passing through each pair of slots and being pivotally mounted on one of said shafts, a flat cam-actuating member common to all said cams and having portions engageable with said cam surfaces movably mounted in said lower box part, said tenpins being tippable from erect to supine position upon being struck, and restorable to erect position upon operation of said cam-actuating member.

2. A game comprising a base, a plurality of tippable elements hinged adjacent their lower ends to said base, said elements normally being upstanding in a substantially vertical position to form targets above said base and tippable rearwardly to a substantially horizontal position, said elements being arranged in the manner of tenpins, each of said elements being wider than the space between the pair of elements immediately to the rear thereof to knock over said rearwardly positioned elements by tilting of the element in front thereof, a cam secured to the bottom portion of each element, a cam operator for simultaneously engaging the cams of all elements in a horizontal position for raising them to vertical position, and means for actuating said cam operator.

3. A game comprising a substantially flat supporting member having downwardly extending sides defining a space beneath said member, said support having a plurality of openings thereon arranged in a tenpin pattern, a simulated tenpin extending upwardly from each opening and having a base portion extending downwardly through said opening, transverse pivot members passing through said base portions, said tenpins normally being upstanding in a substantially vertical position and being movable rearwardly about said pivot onto said supporting member, each of said bases having a cam portion at the front thereof, and a movable cam operating member for engaging said cam portions below said pivot members, for simultaneously raising all fallen tenpins to a vertical position.

4. A game comprising a substantially flat supporting member having downwardly extending sides defining a space beneath said member, said support having a plurality of openings thereon arranged in a tenpin pattern, a simulated tenpin extending upwardly from each opening and having a base portion with rearwardly extending side members passing downwardly through said opening, transverse pivot members passing through said base portions, said tenpins normally being upstanding in a substantially vertical position and being movable rearwardly about said pivot onto said supporting member, and a projection on each base portion side member for engaging said supporting member when said tenpins are in vertical position to limit their forward motion.

5. A game comprising a substantially flat supporting member having downwardly extending sides defining a space beneath said member, said support having a plurality of openings thereon arranged in a tenpin pattern, a simulated tenpin extending upwardly from each opening and having a base portion extending downwardly through said opening, transverse pivot members passing through said base portions, said tenpins normally being upstanding in a substantially vertical position and being movable rearwardly about said pivot onto said supporting member, each of said bases having a downwardly and rearwardly sloping cam portion at the front thereof, and a substantially flat cam operating member mounted for horizontal movement below said pivot members for engaging said cam portions and raising to a vertical position all fallen tenpins upon actuation thereof.

6. A game comprising a substantially flat supporting member having downwardly extending sides defining a space beneath said member, said support having a plurality of openings thereon arranged in a tenpin pattern, a simulated tenpin extending upwardly from each opening and having a base portion extending downwardly through said opening, transverse pivot members passing through said base portions, said tenpins normally being upstanding in a substantially vertical position and being tiltable rearwardly about said pivot onto said supporting member, each of said bases having a downwardly and rearwardly sloping cam portion at the front thereof and below said pivot members when said tenpins are vertical, and a substantially flat cam operating member having a plurality of openings registerable with the openings in said supporting member for receiving therein said base portions, said cam operating member being positioned below said pivot members for engaging said cam portions and raising to a vertical position all fallen tenpins upon actuation thereof.

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