Sept. 17, 1940. R. BISHOP ET AL 2,215,261

GAME DEVICE

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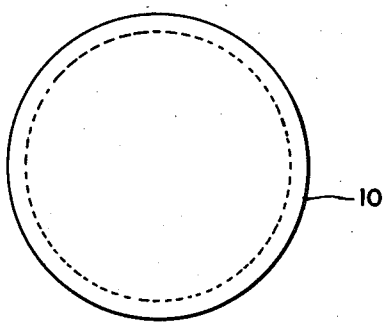


FIG.-1

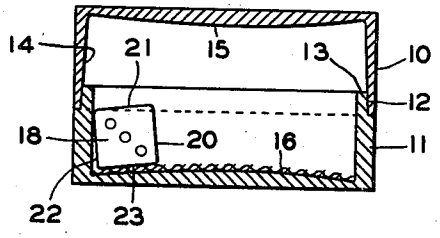


FIG.-2

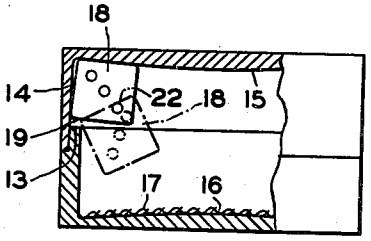


FIG.-3

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GAME DEVICE

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1 Claim. (Cl. 273—145)

This invention relates to a game device and more particularly to a dice box which in combination with dice of the proper size can be easily manipulated to throw any desired number or combination of numbers on the dice.

The purpose of the present invention is to so design and construct a dice box and a die or dice to be used therein that upon suddenly throwing the dice from the bottom to the top of the box as by shaking, the dice will be turned through a predetermined angle so as to bring up any desired number. The specific arrangement of the parts by which this purpose is carried out will be more clearly understood from the accompanying drawing and specification which sets forth a preferred embodiment of our invention, and the essential features thereof will be set forth in the claim.

In the drawing, Fig. 1 is a top view of the box; Fig. 2 is a central section through the closed box showing a die resting upon the bottom; and Fig. 3 is a similar view showing the die in full lines as thrown against the top of the box and in dash-dot lines falling back toward the bottom in a turned position.

We shall describe the box and the dice to be used therein in terms of definite dimensions which we have found to give the best results. It will be understood that these dimensions are proportional only and that, for instance, if the dimensions of the box were doubled then the dimensions of the dice should be doubled also, as will be readily understood. Also we shall describe our invention as embodied in the structure which performs as intended substantially perfectly, that is to say on every throw of the dice, although if our teachings are departed from to a certain extent the device will still operate as here described but with less certainty.

The box here shown is molded from Bakelite, pyroxylin or similar material but it will be understood that the device operates the same regardless of the material of which the box is made.

The box here shown has a top 10 and a bottom 11. The side walls of the box have an interior cylindrical surface of approximately two and one-sixteenth inches inside diameter for a distance of about nineteen thirty-seconds of an inch upwardly from the center of the bottom and then the interior walls become approximately two and three-sixteenths inches inside diameter for a distance of approximately fifteen thirty-seconds of an inch up to the mid point of the top. Referring to Figs. 2 and 3 it will be noted that this arrangement of the interior wall surface is arrived at by having the top telescope the bottom on the outside for approximately three-sixteenths of an inch at the point 12. This leaves an annular shoulder 13 around the inner wall of the box for a purpose to be presently described. If desired the inner side wall of the top as indicated at 14 may be slightly tapered so as to give a snug fit where the top engages the bottom.

To get the best results the interior surfaces of the top and bottom forming the two ends of the closed box are inclined to cause a die resting upon these surfaces to tend to move toward the side wall of the box. While this might be formed in various ways the preferred form is shown in the drawing wherein the top and bottom surfaces are convex inwardly and are surfaces of a sphere having approximately eight and five-sixteenths inches radius. The surfaces here referred to are indicated at 15 on the top member and 16 on the bottom member. Preferably also the bottom has a covering of cushioning material to more accurately control the dice and as here illustrated this covering 17 is a thin piece of felt.

The proper size of dice for use in the above described box are approximately seven-sixteenths to one-half inch in each dimension. It will be noted therefore that the distance from the top to bottom inside of the closed box is slightly more than twice the dimension of the die. It results from this relationship that when a die lying in the position of Fig. 2 is suddenly thrown against the top surface 15 as by a sudden shake, the die 18 is tilted with its bottom toward the side wall 14 as shown in full lines in Fig. 3, and when the die begins to fall back toward the bottom its edge 19 engages the shoulder 13 which helps to tilt the die through ninety degrees, the turning of the die being illustrated in dot-dash lines in Fig. 3. The felt cover 17 prevents undesirable bouncing of the die as it returns to the bottom of the box. The curved surface 16 insures that the die will rest against the side wall of the bottom in the position of Fig. 2 before the die is thrown upwardly by shaking the box. This makes certain that the die will be turned as illustrated in Fig. 3 when the box is sharply shaken.

It will be obvious to those familiar with dice that the combination of box and dice here disclosed may be manipulated to bring up any number on the top of the die to the mystification of the onlooker. For instance if the die shown at 18 shows one on the face 20 and two on the face 21, then the face 22 toward the side of the box carries the number six, and face 23 carries the number five. Having verified this at a glance the

manipulator places the cover on the box and if he predicts a six he shakes the box once, if he predicts a five he shakes the box twice, and three times for a one, and four times for a two. By distracting attention he can find opportunity by shaking the box when the cover is off or by touching the die with his finger to turn it so as to bring the three to the position of the original face **20** or **22**. He can then turn up a three or a four if he desires. It will be obvious that the same rules apply to a combination of two dice in the box so that one may throw any desired "point" or may throw a seven or eleven by merely seeing that the dice are setting in such a position that one, two or three throws will bring up the desired combination.

It will be noted that the corner edges of the dice are slightly rounded as this aids greatly in the accuracy of the device.

We claim:

A closed dice box for use with a cubical die having a side of predetermined length, comprising top and bottom box portions substantially cylindrical in form, said top portion fitting telescopically on said bottom portion, the inside diameter of said bottom portion being slightly less than the inside diameter of said top portion so as to provide an annular shoulder on the inside wall of the cylindrical box, and said shoulder being spaced from the interior top surface of said box slightly more than said length.

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