Feb. 21, 1939. J. C. BOWMAN 2,148,097

DICE CUP

Filed Aug. 1, 1938

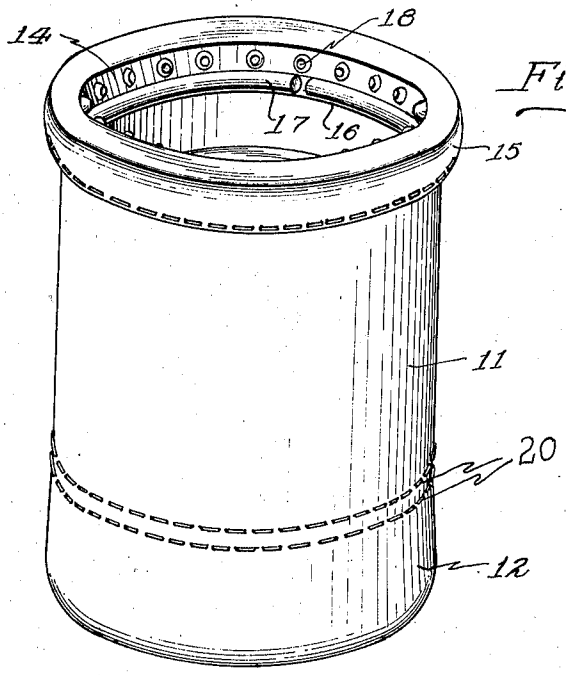


Fig. 1

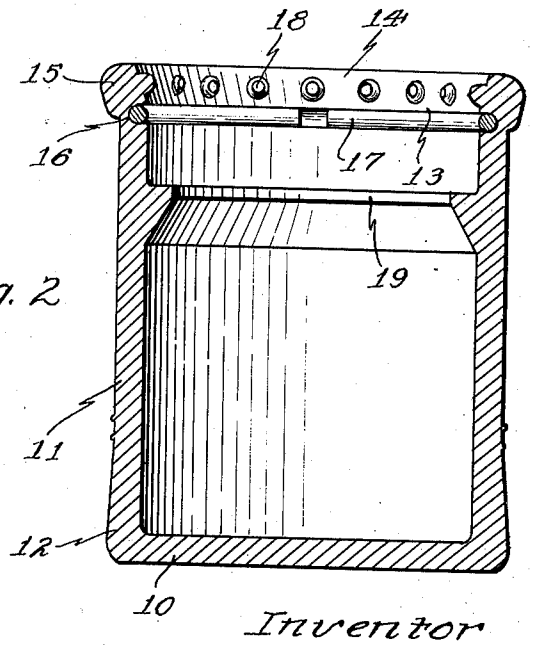


Fig. 2

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DICE CUP

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3 Claims. (Cl. 273—145)

My invention refers to dice cups or like dice receptacles used for shaking and throwing dice in connection with various games of amusement, one of the principal objects of the invention being to provide a dice box with which only fair throws of dice are possible and which entirely eliminate unfair pre-arrangement, positioning and throwing of the dice in a predetermined movement and manner for the purpose of causing the dice to be presented in a manner predetermined by the player who may be an expert in pre-positioning and pre-determined definite movements of the dice box.

A further object of the invention is to provide an inexpensive dice receptacle of substantially cylindrical construction and formed by moulding or the like principally in one piece, which receptacle has a plurality of inwardly spaced apart projecting studs upon the inner surface of the dice cup which are adapted to engage the dice as the dice are caused to move from within the cup, such engagement and consequent tumbling of the dice eliminating the possibility of sliding or expertly throwing the dice in a manner desired and predetermined by the user.

A further object of the invention is the provision of a cylindrical dice cup of semi-flexible material having a plurality of inwardly projecting members along the inner wall of points substantially below the rim of the cup as well as at points substantially adjacent the rim of the cup and which cup is provided with a yieldable resilient spring removably mounted inside of the cup to normally hold the cup in its proper form and to impart rigidity thereto.

Other and further objects of my invention will be apparent from the following description and claims.

This invention (in a preferred form) is illustrated in the drawing and hereinafter more fully described.

On the drawing:

Figure 1 is a side elevational view of my invention showing the outside of the cup and showing rows of simulated stitching.

Fig. 2 is a cross sectional view of my cup taken in a plane passing through the vertical axis thereof.

Referring to the drawing, the reference numeral 10 indicates the cup bottom which is formed integral with cylindrical side walls 11 in a position so that said side walls are inclined slightly outwardly at their uppermost edge as indicated, the same being preferably made of a flexible or semi-flexible material such as rubber, but which may also be satisfactorily formed from either metals or various mouldable material such as Bakelite, hard rubber, or the like, or a composition of the same. In the preferred form shown, the vertical cylindrical walls 11 of the cup are formed relatively thicker at the bottom to form a thicker portion 12, and also thicker at the upper periphery or edge 14 of the cup to form integral flange 15. The intermediate annular portion of side walls are formed to present an inwardly and horizontally projecting rim or flange 19, the lower surface of which is substantially inclined or beveled as indicated in Fig. 2.

For greater rigidity and strength in construction the upper periphery 14 of the cup is also so moulded to form outer annular flange 15, as clearly shown in Figs. 1 and 2. A relatively narrow annular groove 16 is formed on the inside surface of the cup opposite integral flange 15, as shown in Fig. 2, this groove providing for the insertion and removable seating of the circumferential yieldable spring or ring 17. The ring 17 is preferably made of spring steel and has its ends substantially adjacent but separable to permit compression and expansion of the spring and consequent convenient insertion and removal thereof. It will be apparent that because said spring 17 snugly fits into the annular groove 16, the upper portion of the cup walls will be normally held in normal and proper substantially round shape and position.

An important feature of my invention which comprises part of the means for engaging and tumbling the dice on their path outward from the cup are a plurality of spaced apart integrally formed relatively short studs 18 which preferably project a distance of one-eighth of an inch from the inner surface of the rim of the cup and at distances apart less than the thickness of the dice usually employed. It will be apparent that due to the inward projection of the studs 18, the dice, during their outward movement from the cup, due to the throw thereof where their path of travel is substantially along the inside surface of the cup, will engage said dice to rotate and tumble the same before the same drop to a board or other flat surface upon which they finally rest. These studs 18, together with inwardly projecting flange 19, provide means for rotating and tumbling the dice, and eliminates the possibility of unfair and pre-determined expert movement of the cup, and the sliding or otherwise projecting the dice in a pre-determined manner for the purpose of causing the dice to rest in a pre-determined manner.

The studs 18 in the upper rim 14 may be staggered in different planes, though spaced apart as above indicated.

The flange 19 is preferably moulded as a part of the cup and simultaneously therewith, but may also be made separately and manually inserted and secured in a position and plane so that its outer surface can be sealed by glue or vulcanized with the inner substantial vertical wall of the cup to thereby hold the same in position. The position at which this inwardly extending flange 19 is formed or moulded is approximately one inch below the rim of the cup, which is equal to approximately one-third the distance from the cup rim to its bottom. It will also be apparent that two or more inwardly extending flanges like the flange 19 may be formed or mounted on the inner wall of the cup for the purpose of successively and more frequently engaging and tumbling the moving dice being thrown from within the cup, and I desire that such duplication be within the scope of my invention.

Numeral 20 designates an imitation or simulation of spaced apart lines of stitching which are formed in the moulding process merely for appearance.

I am aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not desire to limit the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. In a dice cup having an integrally formed outwardly projecting annular flange along the upper rim of the cup, the annular cup wall having a circumferential inwardly opening groove therein substantially adjacent said flange; an annular metal spring removably seated in said groove; and a plurality of inwardly projecting studs formed integrally with the cup wall adjacent said spring and normally projecting toward the center of the cup.

2. In a dice cup, a substantially cylindrical body of flexible material having a flat bottom and substantially vertical side walls, said side walls terminating in a relatively thicker annular rim, an inner portion of said rim projecting slightly outwardly; a yieldable metal spring removably mounted against the inner surface of said side walls at a point below said rim, said spring being adapted to normally maintain said cup in cylindrical form; and a plurality of integrally formed inwardly projecting studs on the inside of said cup spaced apart from said spring.

3. In a dice cup, a substantially cylindrical body of flexible material having a flat bottom and substantially vertical side walls, said side walls terminating in an annular projecting integral flange, a yieldable annular spring mounted adjacent the inside surface of said cup rim for normally holding same in round position, a plurality of spaced apart studs on the inside surface of said cup and along the rim of the cup; and an inwardly projecting annular flange formed integral with the wall of the cup below said spring and said studs.

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