May 17, 1927. 1,629,142

L. BONELL

DICE BOX

Filed June 12, 1924

Fig. 1.

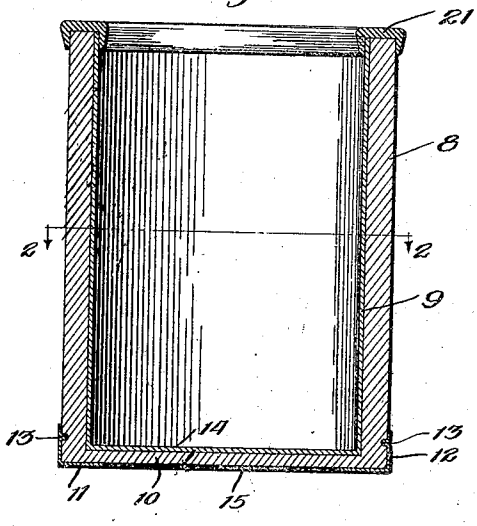



Fig. 3.




Fig. 4.

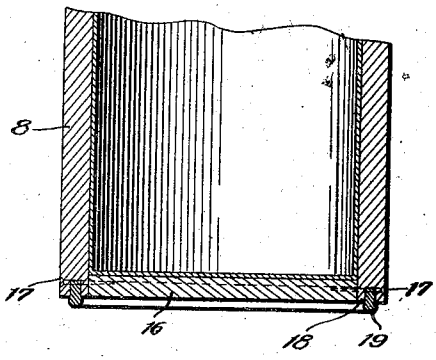



Fig. 5.

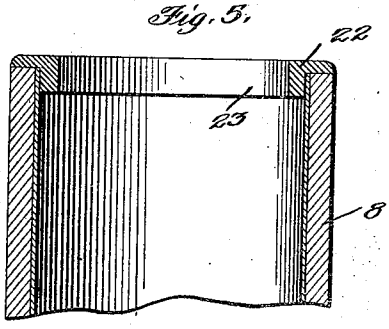



Fig. 6.

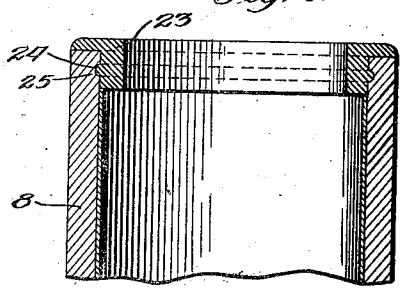



Fig. 2.

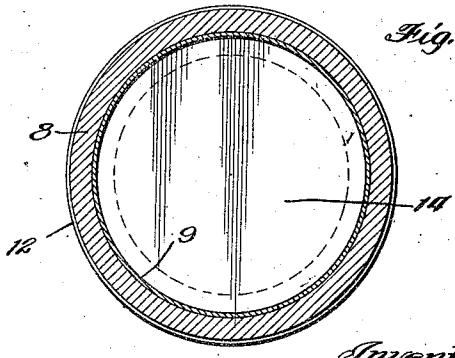
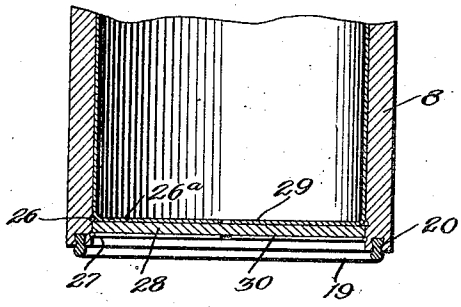



Fig. 7.




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# UNITED STATES PATENT OFFICE.

LAWRENCE BONELL, OF CHICAGO, ILLINOIS.

## DICE BOX.

Application filed June 12, 1924. Serial No. 719,487.

This invention relates to improvements in dice boxes, the body of which and a separate bottom piece therefor have heretofore consisted of stitched leather, and which, in a comparatively short time came apart from the breaking of the stitching threads, which dice boxes are also subject to the further objection that no obstruction is provided therein for imparting a whirl to dice when thrown from the box, and as a result of which the thrower has the dice more or less under his control.

The prime object of my invention broadly stated, is a dice box, the body and bottom of which are constructed of indestructible material, provided with means for securely locking them together against accidental detachment.

A further object of my invention is to provide such a dice box with an attachable obstruction surrounding the edges of the body portion, which, when worn-out, is renewable.

Another object of my invention is to provide the bottom edge of the body portion of a dice box with a cushion surrounding the bottom edge thereof, for rendering the box noiseless when placing it in a position of rest, and which is renewable.

With these ends in view, my invention finds embodiment in certain features of novelty in the construction, combination and arrangement of parts by which the said objects and certain other objects are attained, all as hereinafter fully described with reference to the accompanying drawings and more fully pointed out in the claims.

Fig. 1 illustrates, in central longitudinal section, a dice box in which my invention finds embodiment.

Fig. 2 is a transverse section taken on the line 2, 2 of Fig. 1.

Fig. 3 is a transverse section through the obstruction located on the rim of the box shown in Fig. 1.

Fig. 4 is a detailed vertical section, showing a modified construction of the bottom for the box.

Fig. 5 is a vertical section of the box, showing a modification of the obstruction for the dice located at the rim of the box.

Fig. 6 is a similar view, showing a still further modification of such obstruction; and

Fig. 7 is a similar view showing another modification of the means for securing the bottom to the body of the box.

Similar characters of reference indicate the same parts in the several figures of the drawings.

8 indicates the body of the dice box, which is cylindrical in form, open at both ends, and preferably constructed of aluminum or vulcanized rubber severed from stock tubing, which, when of rubber, is preferably hard and thin enough to be but little compressible, and which, when of resilient vulcanized rubber, is accordingly thicker.

As a means for deadening the sound from the shaking of the dice, the cylinder is lined with a textile fabric, but may be with leather or other non-sound-conducting materials, as indicated at 9.

One end of the box is closed by a bottom piece 10, which, as shown in Fig. 1, extends across the end of the body to contact with the edges thereof and is secured thereto by a surrounding L-shaped metal or hard rubber ring 11, angular in cross-section, the vertical flange 12 of which is tightly forced against the periphery of the body portion 8, and, if desired, may be locked thereto by punching the materials of the flange into the body portion, as indicated at 13.

The bottom 10 is preferably faced with a sound-deadening material 14 before attaching it to the body portion, the material of the body portion being exposed through the central portion of the ring, as indicated at 15.

Fig. 3 shows a modified form of construction in which a bottom 16, of suitable material, is located and confined between the inner walls of the body portion 8, flush with the adjacent edges thereof and held against detachment by brads 17 or screws, as may be.

The edges of the bottom portion, as shown in Fig. 4, are provided with an annular groove 18, adapted to receive and retain a cushioning ring 19, which may be constructed either of felt or soft vulcanized rubber, as desired, and may be dovetailed in the opposing edge of the body portion of the box, as indicated at 20 in Fig. 7.

As heretofore constructed, so far as I am aware, the inner walls of the body portion of all dice boxes extend in straight lines from end to end, and as a result of which

the roll of the dice thrown from the box can be more or less controlled by the thrower, to his own advantage.

By my invention, however, the possibility of any such control is effectually prevented by securing to the edge of the open end of the box an obstruction which, as shown in Fig. 1, consists of a grooved hard or soft rubber ring 21, the groove of which ring, being normally in the form of a dovetail, so that when forcing the ring downwardly upon the edge of the body portion of the box, the flanges of the ring will tighten and hold the ring in its operative position.

In Fig. 5 is illustrated a modification of the above obstruction, in which the ring 22 extends across the edge of the body portion and inwardly thereof is provided with a flange 23, so formed that when forced into the body portion, it will tightly embrace the inner walls or lining thereof, as may be, and hold the ring against accidental detachment.

A modification of the ring shown in Fig. 5 is illustrated in Fig. 6, in which the flange 23 is provided with a surrounding body 24, adapted to be sprung into a groove 25 surrounding the inner wall of the body portion, which bead and groove provide a means better adapted for retaining the ring against accidental detachment than in the form shown in either Figs. 1 or 5 of the drawings.

In Fig. 7 is shown still another means for closing one end of the cylindrical body portion of the box, and for the more convenient removal of the bottom than is shown in any of the other figures, and in which the inner walls of the body portion are provided with parallel annular grooves 26 and 27, between which is located the bottom piece 28, held in place by split wire rings 29 and 30.

The concept of my invention is a dice box, the body and attachable bottom of which are constructed of materials which are indestructible, as compared with leather, the form and method of the body portion of which are such that they may be cheaply constructed and quickly assembled, and thereafter stand harder and much longer usage, without injury, as compared with the leather dice boxes now commonly in use.

My invention, however, is not limited to the use of rubber, but includes dice boxes made of celluloid, wherein the body is formed separately from the bottom of such boxes.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. A dice box, provided at its open end with a surrounding inwardly projecting resilient ring, and means adapted for utilizing the resiliency of the ring to secure and lock it in its operative position to the body of the box.

2. The combination with a dice box, of a flexible ring extending across the edges of the open end of the box, and provided with an inwardly projecting flange, adapted to be sprung to locked engagement with the opposing wall of the box.

3. In a dice box, an open-ended cylindrical body of hard non-fibrous material having a groove therein to receive an expansible split ring, a bottom for said body detachably secured within said body by means of said ring, and a non-sound-producing ring recessed in the bottom edge of said body.

In witness whereof, I have hereunto set my hand this 3rd day of May, 1924.

LAWRENCE BONELL.