A. M. LANGWORTHY.

DICE THROWING DEVICE.

APPLICATION FILED AUG. 2, 1912.

1,054,694.

Patented Mar. 4, 1913.

2 SHEETS—SHEET 1.

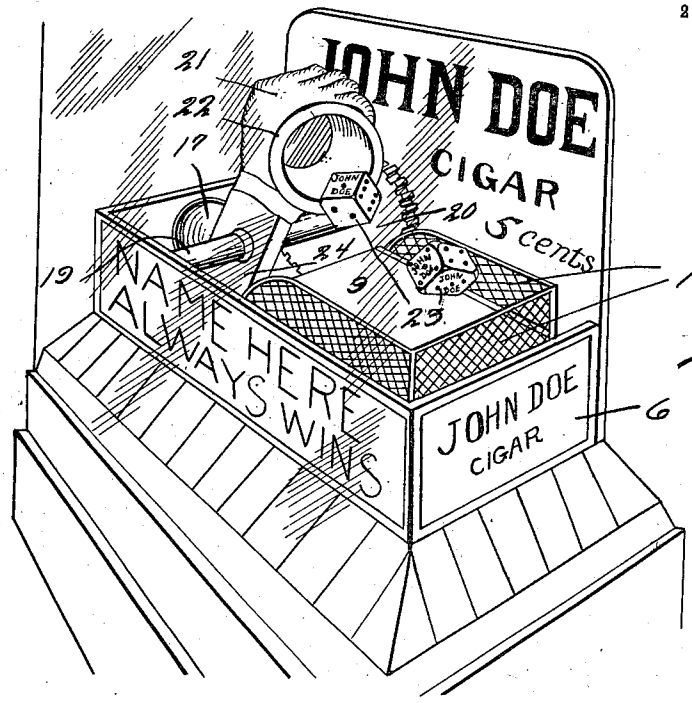

Fig. 1.

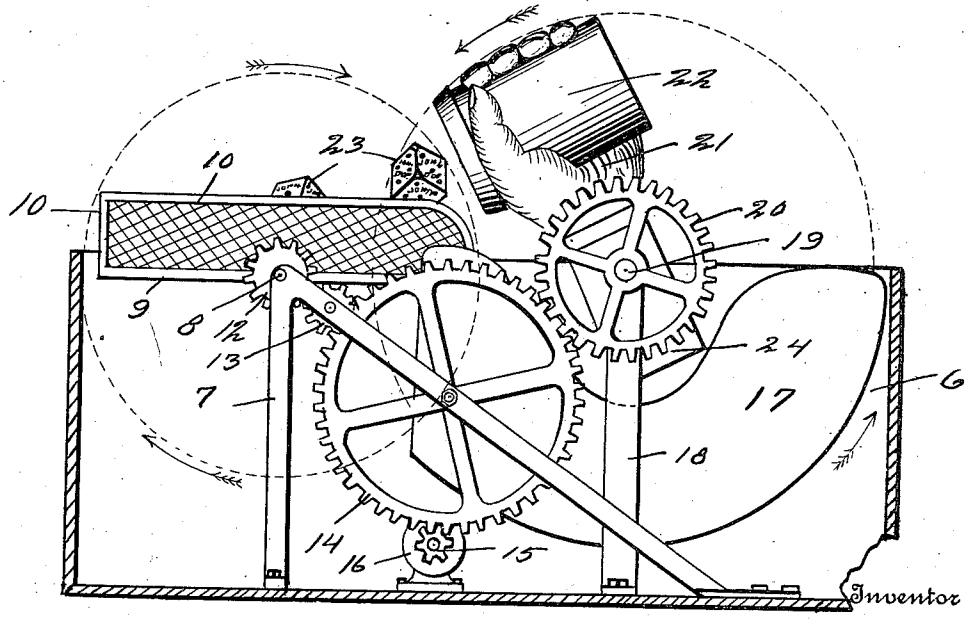

Fig. 2.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

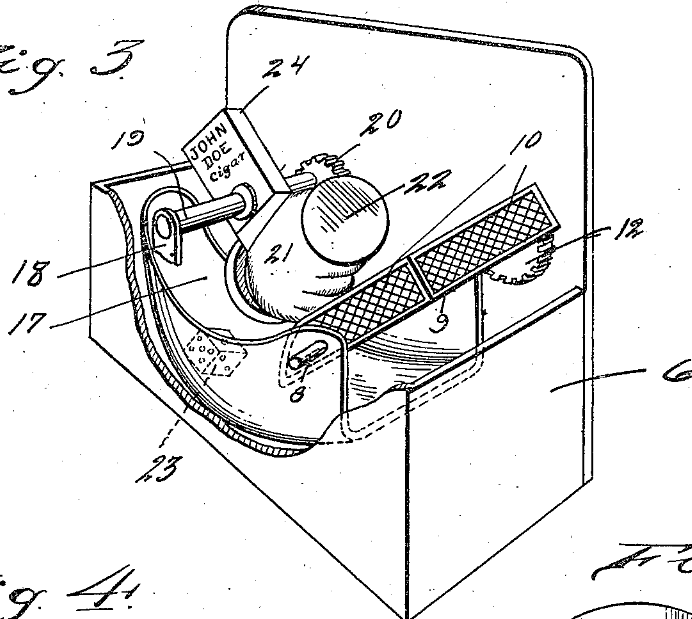


Fig. 4.

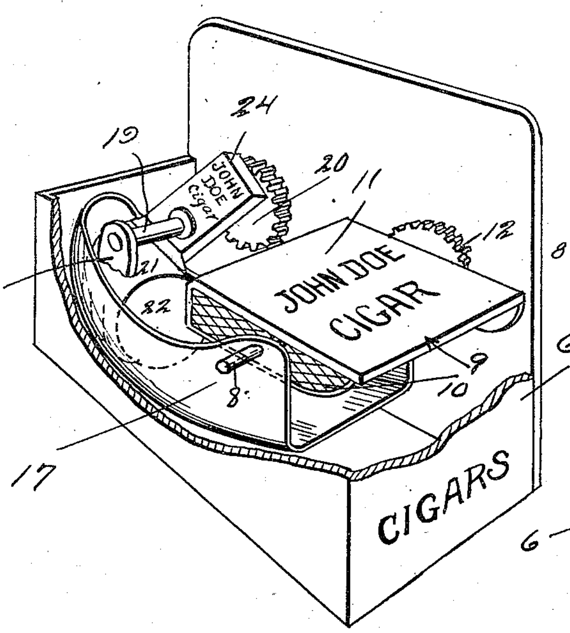
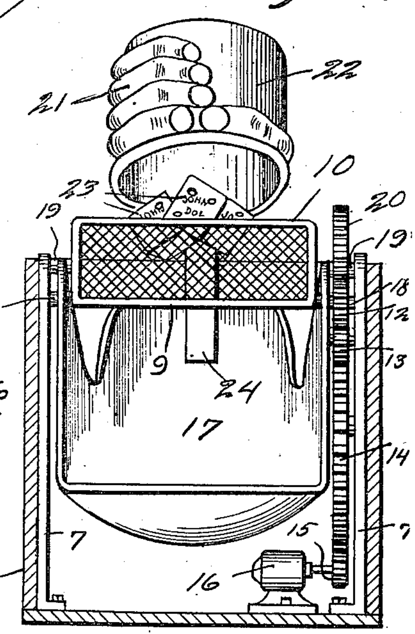


Fig. 5.



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UNITED STATES PATENT OFFICE.

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DICE-THROWING DEVICE.

1,054,694. Specification of Letters Patent. Patented Mar. 4, 1913.

Application filed August 2, 1912. Serial No. 712,870.

To all whom it may concern:

Be it known that I, ARTHUR M. LANGWORTHY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Dice-Throwing Devices, of which the following is a specification.

The present invention relates to an advertising apparatus and has particular reference to a mechanical device for throwing dice.

An important object of this invention is to provide means of the above mentioned character, which is exceedingly interesting to watch in its operation, whereby crowds may be readily attracted to a show window or the like wherein the device is located, for the purpose of advertising goods associated with such device.

A further object of the invention is to provide a device of the above mentioned character, which is automatic and continuous in operation.

The device comprises generally a cup or receptacle for holding the dice and throwing them upon a dice board, which is movable to throw the dice into a collecting chute or trough so that they may be scooped up by the cup or receptacle as it passes therethrough. In this manner the device is thus capable of operating continuously for any desired length of time without the aid of an attendant. Suitable means are employed to effect the movements of the dice cup or receptacle and the dice board.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same, Figure 1 is a perspective view of the device as a whole, Fig. 2 is a side view of the same with one side wall of the main casing removed, Fig. 3 is a perspective view of the device showing the dice cup or receptacle as it is about to enter the collecting chute or trough, Fig. 4 is a similar view showing the dice board completely inverted and the dice cup disposed within the chute or trough, and, Fig. 5 is an end view of the device, the main casing being shown in section.

In the drawings, wherein for the purpose of illustration, I have shown a preferred embodiment of my invention, the numeral 6 designates a main casing upon which may appear any suitable advertisement. Disposed within the main casing 6 are spaced upstanding brackets 7, through the upper ends of which is journaled a horizontal rotatable shaft 8. Rigidly mounted upon the shaft 8 is a dice board 9, provided upon one surface with side and end walls 10 and upon its opposite surface with a suitable advertisement 11. It is thus seen that when the shaft 8 is rotated the dice board 9 is also rotated, as indicated by the arrows in Fig. 2. Rigidly connected with the shaft 8 is a small pinion 12, engaged by an intermediate small pinion 13, which is driven by a common large pinion 14. The large pinion 14 is rotated by a small pinion 15, receiving its rotation from an electric motor 16. Instead of providing the electric motor 16 I may employ a spring motor or any other suitable source of power. Disposed within the main casing 6 and near one end thereof is a collecting chute or trough 17. As shown by the dotted line in Fig. 2, the ends of the dice board 9 rotate through the open end of the chute or trough 17.

The numeral 18 designates upstanding brackets through the upper ends of which is journaled a horizontal rotatable shaft 19 carrying a large pinion 20 rigidly connected therewith. This pinion engages the large common pinion 14. Rigidly mounted upon the shaft 19 is a hand 21, holding a dice cup or receptacle 22, adapted to rotate through the trough or chute 17 and scoop up the dice 23 therein. Connected with the hand 21 is a counter weight 24, which is disposed upon the opposite side of the shaft 19 with respect to the hand 21, to balance the hand, whereby the device will operate smoothly. The counter weight 24 may be made in any ornamental form or may be made to represent the merchandise which is being advertised. In this particular instance I have shown the counter weight 24 as being a box of cigars. If desired, the dice 23 may have printed thereon any suitable advertisement.

The operation of the device is as follows:—Assuming that the different elements occupy the positions shown in Figs. 1 and 2, the dice 23 will be thrown upon the dice board 9. The cup 22 and dice board 9 are continuously rotated in opposite directions as indicated by the arrow. The dice board 9 is preferably rotated about twice as fast as the cup 22. After the dice 23 have come to rest upon the dice board 9, said dice board is further rotated to dump the dice into the

chute or trough 17. The cup 22 following the dice board 9 passes into the chute or trough 17 and scoops up the dice. By the time the cup 22 is again moved to its upper or throwing position, the dice board 9 is in its horizontal position to receive the dice. When the dice board 9 is turned upside down the advertisement 11 is exposed.

Although I have shown and described my device to be used as an advertising apparatus, I do not solely restrict myself to this use. It may be advantageously employed as a game apparatus whenever it is desired to have a mechanical device to throw dice.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that certain changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. In a device of the character described, a collecting receptacle, a movable dice catching element disposed near the collecting receptacle, a dice throwing receptacle disposed in coöperative relation with the dice collecting receptacle and the dice catching element, means to move the dice throwing receptacle into the dice collecting receptacle to take up the dice and throw the same upon the dice catching element, and automatic means to move the dice catching element so that the same will discharge the dice back into the dice collecting receptacle.

2. In a device of the character described, a rotatable dice throwing receptacle, a rotatable dice catching receptacle, a relatively stationary receptacle to receive the dice from the dice catching receptacle and through which the dice throwing receptacle passes during a portion of its operation, and means to rotate the dice throwing receptacle and dice catching receptacle.

3. In a device of the character described, a stationary chute, a rotatable dice cup disposed near the chute and passing through the same during its travel, a dice board upon which the dice are thrown from the cup and from which they pass into the chute, and means to rotate the dice cup.

4. In a device of the character described, a rotatable structure including a dice throwing receptacle, means to continuously rotate the structure, and a movable dice catching device disposed near the dice throwing receptacle.

5. In a device of the character described, a chute, a rotatable structure including a dice cup, a rotatable dice board, and means to rotate the structure and dice board in opposite directions.

6. In a device of the character described, a rotatable structure including a dice cup, and a rotatable dice catching device disposed near the same.

7. In a device of the character described, a rotatable structure including a dice cup, and a movable dice catching receptacle disposed near the same.

8. In a device of the character described, a relatively stationary curved dice collecting receptacle, a tiltable dice catching element disposed near the dice collecting receptacle, a dice throwing device mounted above the dice collecting receptacle and adapted when rotated to pass through the same to engage the dice contained therein and throw the same upon the dice catching element, and operating mechanism to continuously rotate the dice throwing device and automatically move the tiltable dice catching element when the dice throwing device is moved to a certain position with relation thereto.

9. In a device of the character described, a supporting structure, a dice throwing receptacle suitably mounted thereon, means to move the dice throwing receptacle through a plurality of complete revolutions in the same direction, a tray disposed near and in the path of travel of the dice throwing receptacle, and automatic means to move the tray out of the path of travel of the dice throwing receptacle when the same is moved into proximity thereto, whereby the dice are thrown from the tray and the receptacle is permitted to freely pass the tray.

In testimony whereof I affix my signature in presence of two witnesses.

ARTHUR M. LANGWORTHY.

Witnesses:

J. H. DUTCHER,

SAMUEL D. HANNAH.