(No Model.)

H. C. BAILEY & H. BARKER.

COIN CONTROLLED DICE MACHINE.

No. 515,104. Patented Feb. 20, 1894.

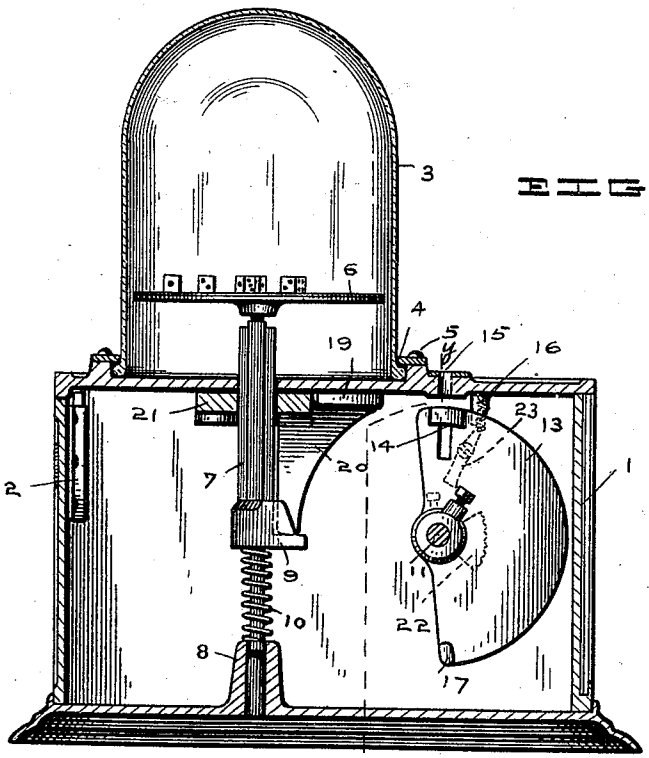
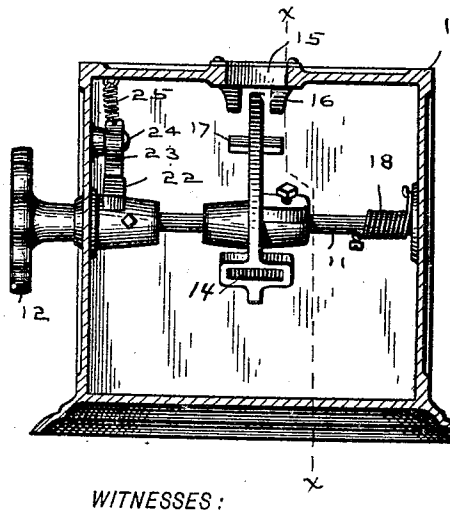
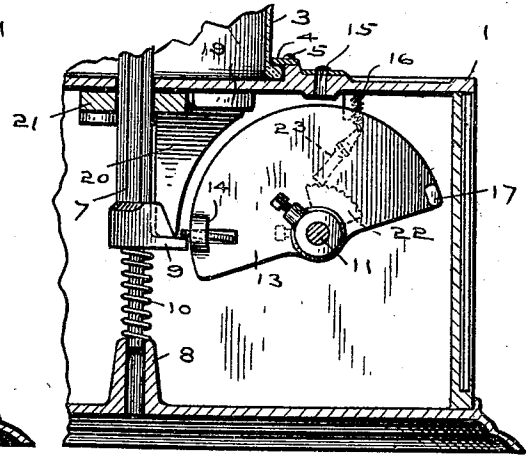


FIG. 1.

FIG. 3.

FIG. 2.





WITNESSES:

H. B. Neely.

M. D. Tilford.

INVENTORS

Henry C. Bailey and
Henry Barker
By
W. H. Lockwood
ATTORNEY.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY C. BAILEY AND HENRY BARKER, OF CHICAGO, ILLINOIS.

COIN-CONTROLLED DICE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 515,104, dated February 20, 1894.

Application filed November 15, 1893. Serial No. 491,070. (No model.)

To all whom it may concern:

Be it known that we, HENRY C. BAILEY and HENRY BARKER, of Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Coin-Controlled Dice-Machines; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

Our invention relates to a coin controlled dice throwing machine, our object being to make a machine simple in construction, cheap in cost and especially one that cannot be "beaten" by the operator, or which cannot "beat" the operator.

The nature of our invention will appear from the following description and the drawings forming a part hereof.

Figure 1 is a vertical longitudinal section of our dice throwing machine on the line *x*—*x* Fig. 3. Fig. 2 is the same as Fig. 1, excepting that one end of the case and the upper portion of the glass covering are broken away, and the coin disk is turned into engagement with the dice supporting rod. Fig. 3 is a vertical cross section of the machine on the line *y*—*y*, Fig. 1.

We make a case 1 with its sides and top secured together by screws in the usual manner, 2 being a locked door.

3 is a glass cover resting on the top of the case and held in place by the lugs 4 which are secured by the screws 5 to the top of the case. The dice rest on a disk 6 within the cover 3. The dice disk is mounted on the dice supporting rod 7 which extends vertically through the top of the case and whose lower end operates vertically in a guide 8 formed on the bottom of the case.

9 is a shoulder formed on the rod 7 for the coin to engage, and 10 is a spiral spring wound about the lower end of the rod 7 between the shoulder 9 and the guide 8 for the purpose of plunging the rod 7 upward whenever it is depressed.

11 is a shaft extending horizontally through the case mounted in the two sides and having on an end extending outside the casing a knob 12 or other suitable means of turning the shaft 11. On the shaft 11 is mounted a coin disk 13 having a laterally extending slot formed by the lateral enlargement 14. This slot is to receive the coin through a corresponding slot in the top of the case at 15. The enlargement 14 on the coin disk engages the stops 16 on the top of the case which makes the slot in the disk correspond with the slot 15 in the top of the case when the coin disk is not operated. At the other end of the disk 13 are lugs 17 adapted to engage the stops 16 after the disk 13 has been operated. The shaft 11 has about it a spiral spring 18 adapted to return the disk to its normal position when the knob 12 is released. The coin disk 13 is of such size that a coin held by the slot in it will engage the shoulder 9 of the dice supporting rod 7 and press it down a certain distance until the coin escapes from engagement with the shoulder, whereupon the dice supporting rod 7 is thrown upward shaking the disk and the coin is dropped into the case. After the coin is placed in the machine and the operator begins to turn the coin disk 13, in order to prevent the coin escaping we provide a reinforcement 19 on the under side of the top having a curved face close to and parallel with the periphery of the disk 13. In the further operation of the coin disk 13 we prevent the coin from escaping from the slot by a curved faced lug 20 formed integral with a cross-bar 21. This bar 21 we use to connect the two sides of the case and hold them independent of the top, and furnish a strong guide for the dice supporting rod 7 which passes through it and also it strongly supports the curved faced lug 20 whose lower end surface has a stop for the shoulder 9 to engage when the dice supporting rod 7 is thrown upward. To afford additional strength to this part of our machine the curved faced lug 20 rests against the reinforcement 19 on the under side of the top of the case. By this construction which we have described and which constitutes an essential feature of our invention we are enabled to carry a coin through the machine without the coin disk losing the coin before the dice are thrown. In other words, with this construction the machine cannot "beat" the operator.

In order to prevent the operator from "beating" the machine by pumping the dice supporting rod 7 several times with a single coin, we provide a curved rack 22 on the shaft 11

and mount a pawl 23 on the pin 24 in the side of the machine, the pawl being adapted to engage the curved rack 22. This pawl is controlled in its action by the spring 25. With this construction, when the operator has commenced to turn the coin disk, the pawl 23 engages the curved rack 22 and prevents the return of the coin disk until it has been completely operated, whereupon the pawl 23 escapes from the rack 22, enabling the spring 18 to at once return the coin disk to its normal position. It is essential that the rack be of such length and the pawl 23 so pivoted, as shown in Figs. 1 and 2, that the machine will operate as above described. We show here one form of ratchet mechanism which we have found to be admirably adapted for the above purpose. But it is evident that a similar ratchet mechanism with a gravitating pawl instead of a spring controlled pawl, would operate in the same manner. We have located the ratchet mechanism here on the shaft 11, but it could be made in connection with the dice supporting rod, so that after the coin had started to press down the rod the ratchet would prevent the rod plunging upward until the coin had been released and it dropped to the bottom of the case.

What we claim as our invention, and desire to secure by Letters Patent, is the following:

1. In a coin controlled dice throwing machine, a revoluble coin disk, a cross bar connecting the two sides of the casing, a dice supporting rod operating vertically through such cross bar, and a curved faced lug so mounted on such cross bar that its curved face will engage the coin and prevent its escape from the coin disk while it is being operated, substantially as shown and described.

2. In a coin controlled dice throwing machine, a revoluble coin disk, a cross bar connecting the two sides of the casing, a dice supporting rod vertically operating through such cross bar and provided with a shoulder to engage the coin, and a curved faced lug mounted on such cross bar whose lower end forms a stop adapted to engage the shoulder of the dice supporting rod and whose curved face is adapted to be close to and substantially parallel with the periphery of the coin disk, substantially as shown and described.

3. In a coin controlled dice throwing machine, a revoluble coin disk, a cross bar connecting the two sides of the casing, a dice supporting rod vertically operating through such cross bar and provided with a shoulder to engage the coin, a curved faced lug mounted on such cross bar whose lower end forms a stop adapted to engage the shoulder of the dice supporting rod and whose curved face is adapted to be close to and substantially parallel with the periphery of the coin disk, and a reinforcement on the under side of the top of the case adapted to support the outer end of the curved faced lug, substantially as shown and described.

In witness whereof we have hereunto set our hands this 30th day of October, 1893.

HENRY C. BAILEY.
HENRY BARKER.

Witnesses:
CHARLES C. STILWELL,
CHAS. C. TILLMAN.