(No Model.)

L. FRENCH.

COIN CONTROLLED DICE THROWER.

No. 497,314. Patented May 16, 1893.

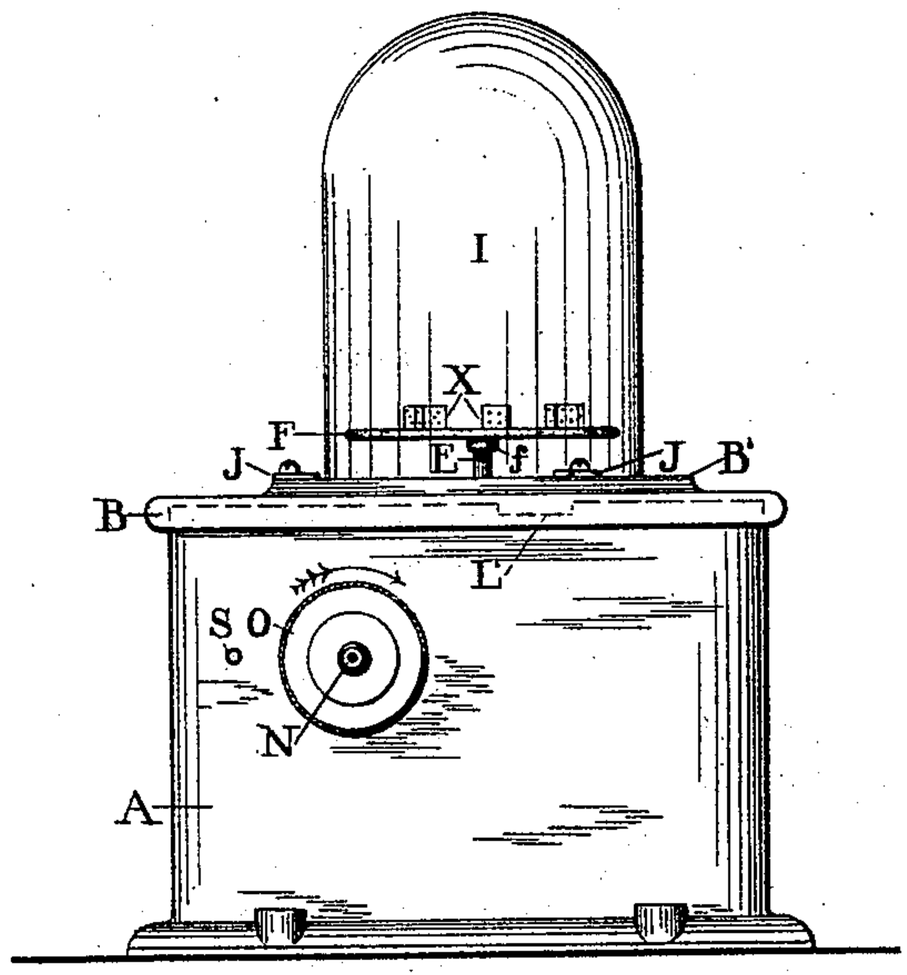

FIG. 1.

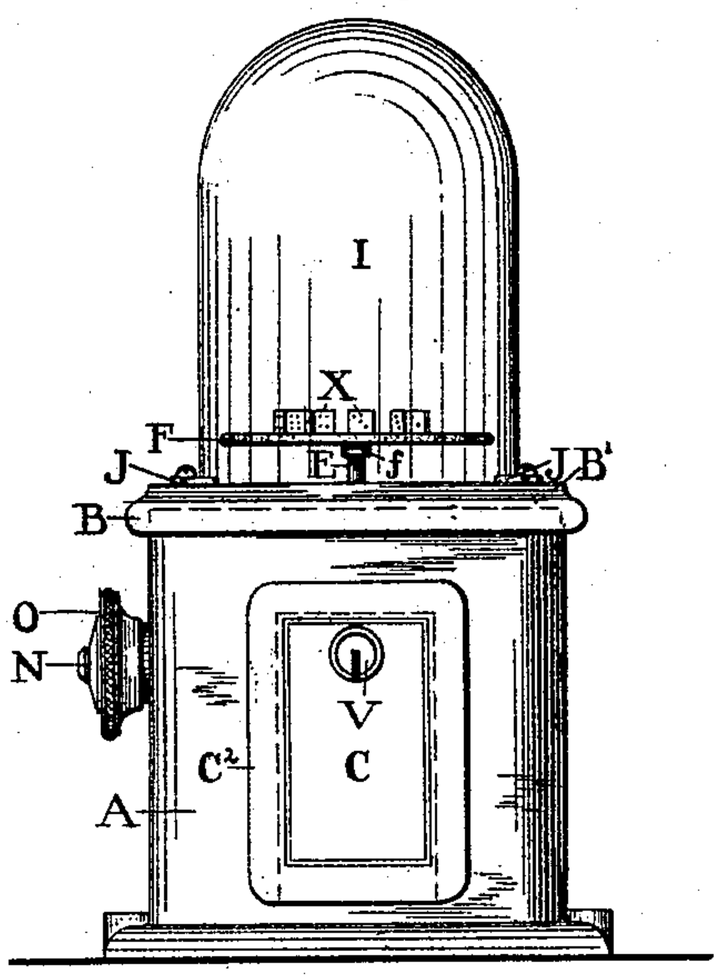

FIG. 2.

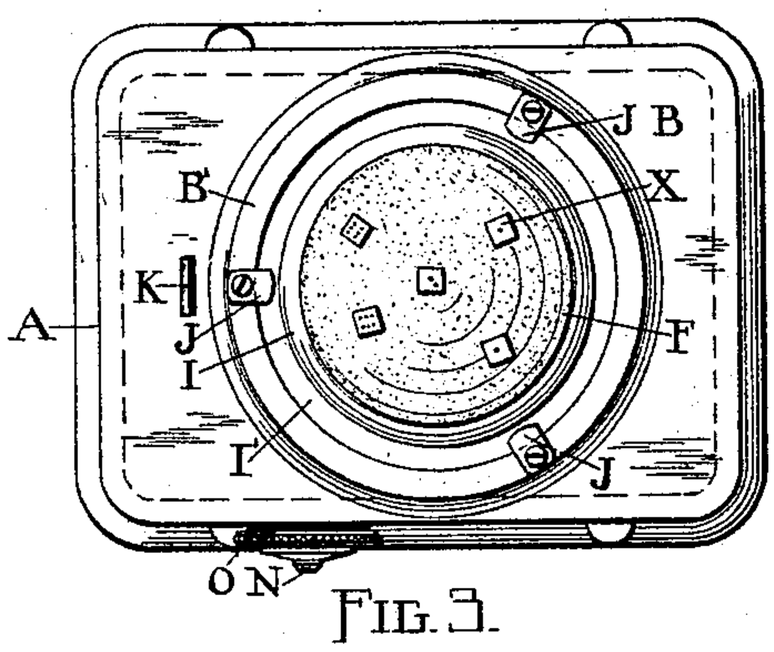

FIG. 3.

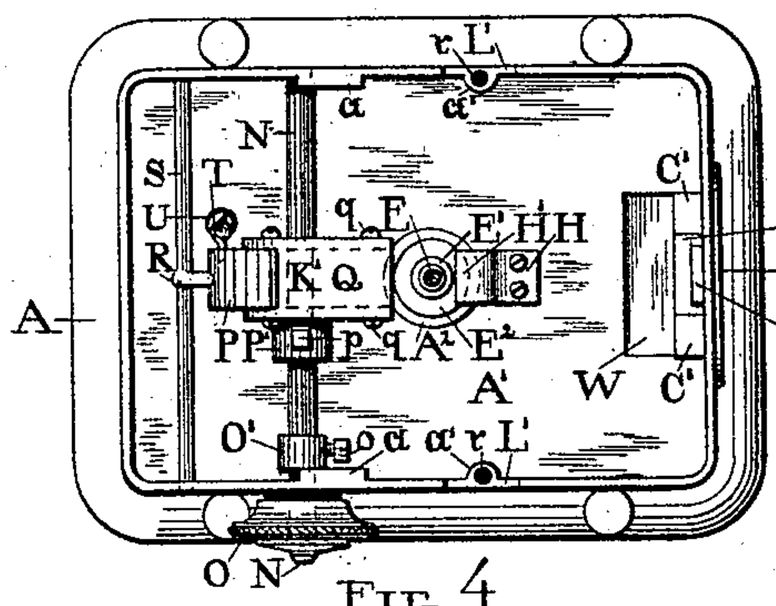

FIG. 4.

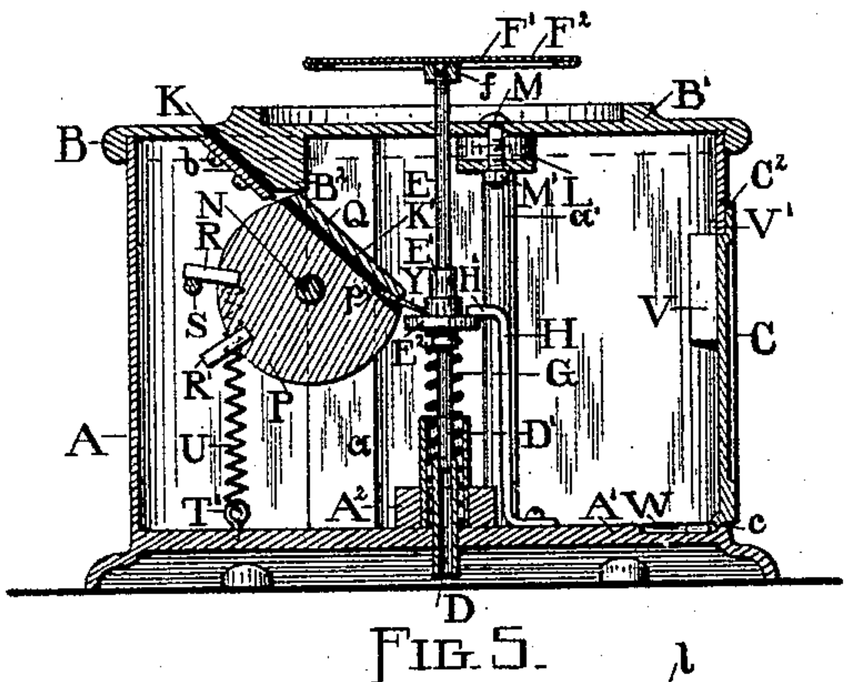

FIG. 5.

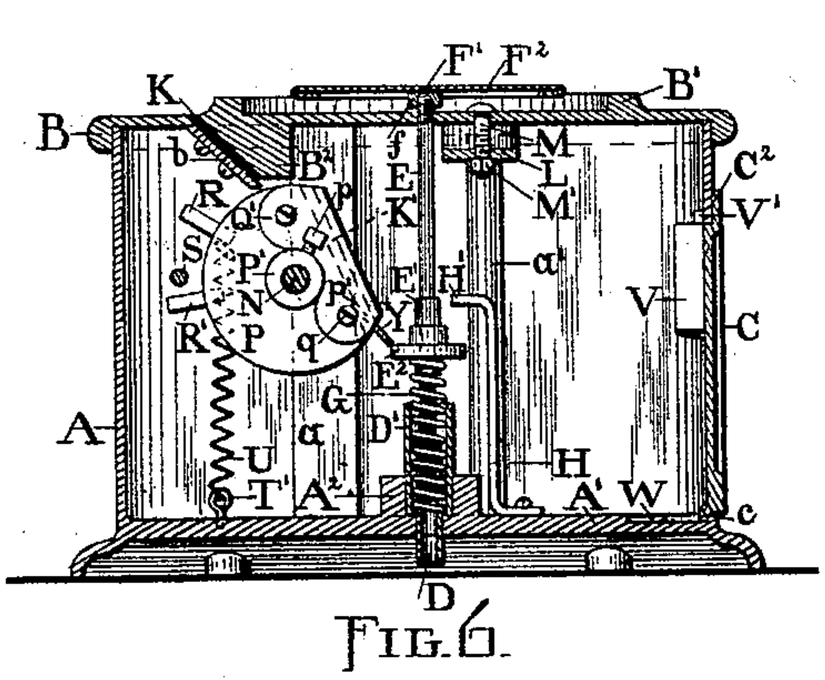

FIG. 6.

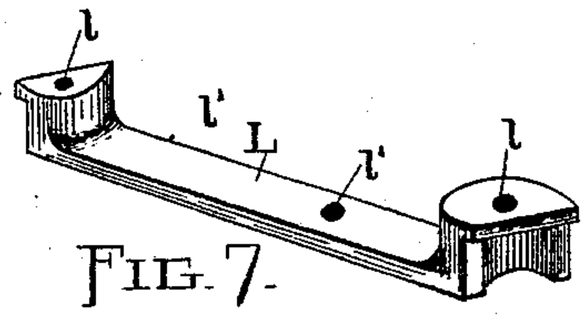

FIG. 7.

WITNESSES:

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By W. A. Burridge Atty.

UNITED STATES PATENT OFFICE.

LAFAYETTE FRENCH, OF CLEVELAND, ASSIGNOR TO IRVING L. PITKIN, OF RAVENNA, OHIO.

COIN-CONTROLLED DICE-THROWER.

SPECIFICATION forming part of Letters Patent No. 497,314, dated May 16, 1893.

Application filed November 25, 1892. Serial No. 453,157. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE FRENCH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new Improvements in Coin-Controlled Dice-Throwers, of which the following is a full, clear, and complete description.

My invention consists of the box, or case, having an external knob, and the inclosed mechanism hereinafter fully described.

The object of my invention is to provide a device for automatically "throwing" or tumbling dice, or other objects, which may be placed upon the disk.

That my invention may be seen and fully understood by others, reference will be had to the following specification and annexed drawings forming part thereof, in which—

Figure 1 is a side elevation of my improved apparatus; Fig. 2, an end elevation of the same; Fig. 3, a plan view; Fig. 4, a plan view with the cover, disk and globe removed; Fig. 5, a vertical, longitudinal section of the case, with the globe removed and showing a coin in position to depress the spindle and disk; Fig. 6, a similar view, showing the spindle pressed down to the lowest point and the coin about to fall to the floor of the case and Fig. 7, a perspective view of the bar with which the cover is secured to the case.

Similar letters of reference designate like parts in the drawings and specifications.

The case A, composed of any suitable material, preferably cast-iron, is provided with the cover B and has the door C, Figs. 2, 4, 5 and 6, in one end. On top of the floor A′, Figs. 4, 5 and 6 of the case A, is the boss A^2, with an opening extending through the center thereof and the floor. The opening in the boss A^2 is larger than the extension of the same in the floor A′. Secured within the opening in the floor A′ is the tube D, Figs. 5 and 6, extending below the floor and above the top of the boss A^2, and the tube D′, surrounding the upper part of said tube D, is secured within the opening in the boss A^2. The tube D′ rests upon the top of the floor A′ and extends above the top of the tube D. The spindle E, Figs. 1, 2, 4, 5 and 6, passes through an opening in the cover B; has the disk F screwed or otherwise fastened to the upper end thereof and the lower end of said spindle is received into the tube D. Fast on the spindle E is the collar E′ Figs. 4, 5 and 6, having the annular shoulder E^2. The spiral spring G, Figs. 5 and 6, partially inclosed by the tube D′, is interposed between the under surface of the shoulder E^2 and the top of the floor. The resiliency of the spring G forces the shoulder E^2 against the lip H′ of the stop H, Figs. 4, 5 and 6, and retains the spindle E, with the disk F, in their normal position, as shown in Figs. 1, 2 and 5.

The stop H is secured to the floor of the case A and has, at its upper extremity, the lip H′ above referred to. The disk F is composed of a thin metallic sheet F′, Figs. 5 and 6, which is covered with cloth F^2, or other suitable material. On the under side of the metallic sheet F′ is the collar *f*, by means of which the disk is secured to the head of the spindle E.

On top of the cover B is the annular ridge B′ which receives the base of the glass globe I, Figs. 1, 2 and 3. The globe I has the flange I′, at the bottom, and the clamps J, which are fastened to the top of the ridge B′, overlap said flange I′; thus holding the globe securely in place. The slot K, in the cover, is formed by the depending portion B^z, Figs. 5 and 6, and the plate *b* attached to said depending portion.

The ribs *a* and *a*′, Figs. 4, 5 and 6, on the sides of the case A are to strengthen said sides and the bar L, of the form shown in Fig. 7, is received into the notches L′, in the sides of said case, above the ribs *a*′. Screws pass into the threaded openings *r*, Fig. 4, in the ribs *a*′, through the openings *l*, in the ends of the bar L, and secure said bar to the case A. The cover B is fastened to the bar L by the bolts M, Figs. 4, 5 and 6, and the nuts M′, said bolts M passing through openings in the cover B and the openings *l*′ in the bar.

The shaft N is received into openings in the sides of the case A and has the knob O, Figs. 1, 2, 3 and 4, fast upon one end thereof, outside of the case. The collar O′ and set-screw *o*, Fig. 4, prevent the shaft O from being withdrawn from its bearings. Centrally located on the shaft O is the segmental-disk P, Figs. 4, 5 and 6, which is rigidly attached to said shaft by the collar P′ and set-screw *p*. The cap Q, having the sides Q′ which embrace the segmental-disk P, is secured to said

segmental-disk, by means of the screws q, in such a manner as to leave the slot K′ between the chord of the segmental-disk and the under surface of the cap. An offset in the lower part of the chord leaves the shoulder p', Figs. 5 and 6, in the segmental disk P, for the purpose hereinafter explained. The pins R and R′, Figs. 4, 5 and 6, are inserted in the convex edge of the segmental-disk P and are of sufficient length to engage the rod S, Figs. 1, 4, 5 and 6, which extends across the case A and is securely inserted in the sides of said case.

To the staple T, Fig. 4, which projects from one side of the segmental-disk P, near its periphery, is attached the upper terminal of the spiral spring U, the lower end of said spring being fastened to the staple T′ in the floor A′. By means of the spring U the segmental-disk P is held in its normal position, with the pin R resting upon the rod S, as shown in Fig. 5.

The door C is provided at the top with the lugs C′, C′, Fig. 4, and at the base with the lip c, Figs. 5 and 6. Between the two lugs C′ is the lock V, Figs. 2, 4, 5 and 6. When the door C is closed the lip c is received into the depression W in the floor and bears against the inside of the base of the door opening and the bolt V′, of the lock, engages the inside of the top of the door opening, while the outside flange C^2, of the door, forms the outer contact, thus securing said door in place. By inserting the key in the lock and turning down the bolt V′ the door may be drawn outward, at the top, and removed.

In Figs. 1, 2 and 3, the dice X are shown, on the disk F, and in Figs. 5 and 6 the coin Y is represented.

To operate my device, the dice X being in place as above stated, it is necessary to insert the coin Y into the slot K, in the cover B. The coin so inserted at once slips through the slots K and K′ and comes in contact with the angle formed by the collar E′, of the spindle E, and the upper surface of the shoulder E^2, while the edge of said coin, opposite to that which is in contact with the collar, drops in front of the shoulder p', in the segmental-disk P, as indicated in Fig. 5. By turning the knob O, in the direction of the arrow in Fig. 1, the coin Y will depress the spindle E, as is clearly shown in Fig. 6, until said coin passes below the periphery of the shoulder E^2 and falls onto the floor A′. The pin R′ comes in contact with the rod S as soon as the coin is released, thereby checking further motion of the segmental-disk in the above indicated direction and, upon releasing the knob O, the spring U draws said segmental-disk into its normal position, with the pin R resting on the rod S. The instant that the coin clears the shoulder E^2 the spindle E and disk F are caused to rebound by the spring G, with considerable velocity, until the shoulder E^2 strikes the lip of the stop H, and the dice are thrown into the upper part of the globe I, after which they settle back on the disk. If there is no coin in the lower part of the slot K′, the segmental-disk may be rotated, within the limit fixed by the pins R, R′ and the rod S, without affecting the spindle E and disk F.

In place of the dice X miniature figures of men and animals, or of other forms, may be used.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a coin controlled dice thrower, a case having a cover attached thereto by the bar L, a shaft with a knob at one end outside of said case, the rod S and a slot in said cover formed by a depending portion and a plate, in combination with a segmental-disk, fast on the shaft, and a cap arranged on said segmental-disk to form a slot, two pins projecting from the periphery of said segmental-disk and a spring arranged to normally force the upper of said pins onto the rod S, in the manner substantially as and for the purpose set forth.

2. In a coin controlled dice thrower, a case with a cover attached thereto by the bar L, a segmental-disk and cap so arranged as to form a slot which is normally in line with a slot in the cover, said segmental-disk being fast on a shaft and having its rotary movement limited and controlled by two pins, a spring, and a rod attached to said case, in combination with a spindle and disk, said spindle having a collar and shoulder, arranged to be operated by a coin, in the segmental-disk slot, against the resiliency of a spring, in the manner substantially as and for the purpose set forth.

3. A dice or object throwing device consisting of a coin and spring actuated disk, spindle and collar, with a stop, and a segmental-disk, fast on a shaft, having a slot formed by a cap over the chord of said segmental-disk, a pin above and below a rod affixed to the case, and a spring, in combination with a case, and a cover attached to said case by the bar L, said cover having a slot therein, of the same angle as the segmental-disk slot, when said segmental-disk is in its normal position, in the manner substantially as described.

4. The combination, in a coin controlled dice thrower of a case having a door and a slotted cover with a transparent globe attached thereto, a perforated boss and floor for receiving two tubes, the disk, the coin and spring actuated spindle and collar, with a stop, a knob and shaft for rotating the segmental-disk, said segmental-disk being provided with two pins and a spring, and a fixed rod between said pins, in the manner substantially as and for the purpose set forth.

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

LAFAYETTE FRENCH.

Witnesses:
W. H. BURRIDGE,
J. N. TODD.