

(No Model.)

2 Sheets—Sheet 1.

J. H. BOWEN.
TOY MONEY BOX.

No. 450,833.

Patented Apr. 21, 1891.

Fig. 1.

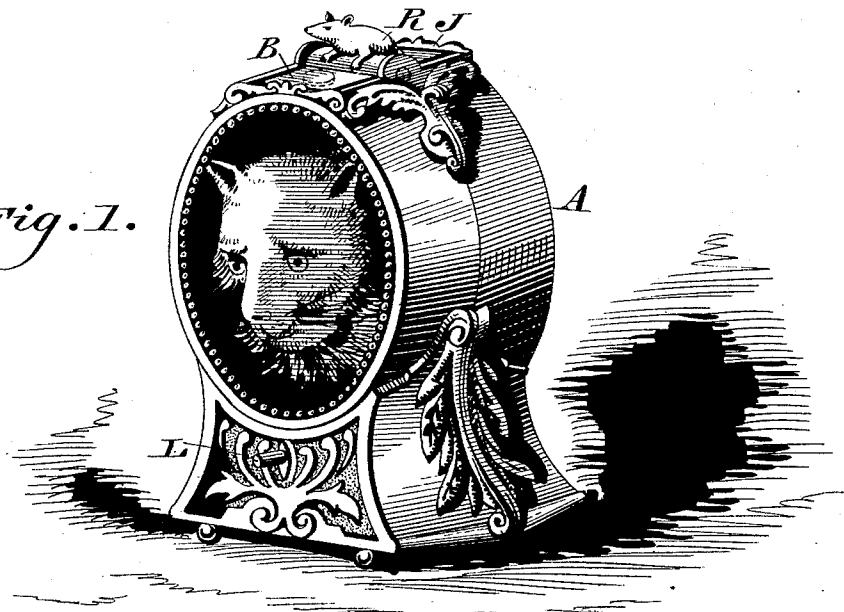
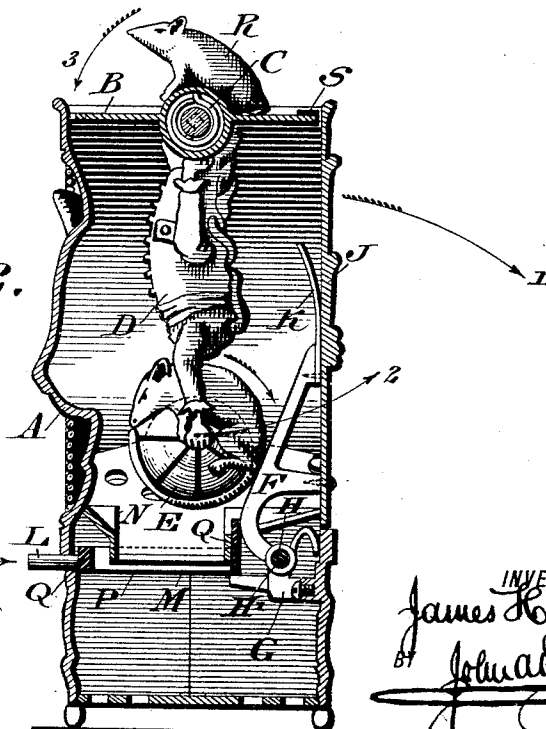


Fig. 2.



WITNESSES:

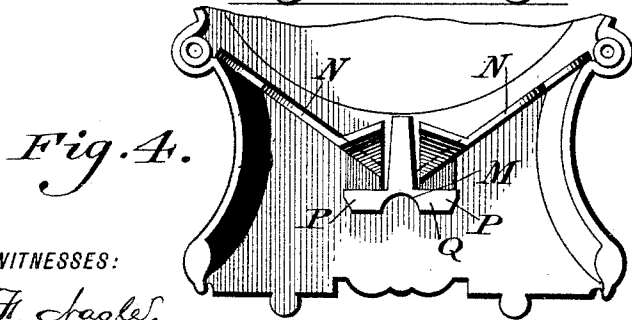
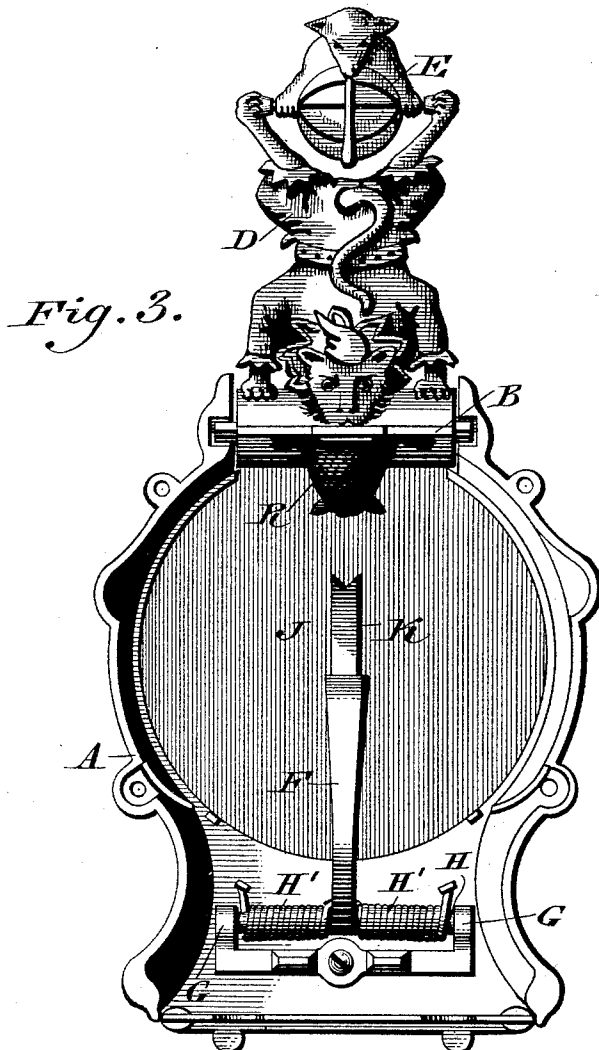
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TOY MONEY-BOX.

SPECIFICATION forming part of Letters Patent No. 450,833, dated April 21, 1891.

Application filed March 24, 1890. Serial No. 345,119. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. BOWEN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Toy Money-Boxes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a toy money-box formed of a box or casing, a spring-actuated tray mounted thereon, and a spring-actuated swinging arm adapted to engage said tray, the spring of said arm being primarily superior to that which actuates the tray.

The invention also consists of the construction and combination of several parts, as will be more fully hereinafter set forth, and pointed out in the claims.

Figure 1 represents a perspective view of a toy money-box embodying my invention. Fig. 2 represents a vertical section thereof on an enlarged scale. Fig. 3 represents a view of the interior of the box at a right angle to Fig. 2. Fig. 4 represents a view of a portion opposite to Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a box or casing, on the upper portion of which is mounted the rotatable tray or holder B for coin or money, the same having connected with its axis or journals the coiled springs C, which latter is also secured to a proper part of the box A, so that while the spring is normally wound up it serves to rotate the tray when the latter is released from its holding mechanism. Depending from the tray is an arm D, which in the present case is of the form of the figure of an animal, and carrying at its lower end a roller E, which bears against a swinging arm F, the latter being mounted in ears G on the lower portion of the casing A. On the axis or axial rod H of the arm F is a coiled spring H', which bears inwardly against the arm F, the latter being secured to a door J at the rear of the box A, said spring H' thus holding the door in closed position, as seen in Fig. 2. Projecting upwardly from the top of the arm F or back of the door is a shoe K, which curves somewhat inwardly and is in the path of the roller E.

L designates a sliding push knob, button, or rod, which is mounted on the walls of the box and bearing against the swinging arm F just above the axis of the latter, so that said arm may be moved and the door J opened to a limited extent.

To the portion of the rod L within the box is secured an open frame M, which is located around the discharge-chute N at the bottom of the box, said chute being inclined and having a central throat by which the coin or money is directed to the bottom of the box, said frame, which consists of side and end pieces P Q, avoiding the closing of the throat of the chute N, and having its inner end adapted to be pressed against the arm F when the rod L is operated.

It will be noticed that the rod L, which supports the front of the frame M, is freely fitted in the wall of the box, while the rear end piece of the frame M rests on a projection of the casing near the ears G, as most clearly seen in Fig. 2. By this provision both ends of the frame are sustained or supported, and said frame is permitted to slide in opposite directions, it being noticed that the inward motion of the rod L, and consequently of the frame M, serves to force out the swinging arm F for opening the door J.

On the upper face of the tray B is the figure R of an animal or other object.

The operation is as follows: When the parts are in their normal position, which are as shown in Figs. 1 and 2, a coin is placed on the tray B, as illustrated by the dotted lines, Fig. 1, after which the push knob, button, or rod L is pressed inwardly, whereby the arm F, and consequently the door J, is forced outwardly. (See arrow 1.) Primarily, owing to the other leverage of the arm F and the action of the spring H', said arm is held against the roller E. Consequently the arm D is prevented from being thrown outwardly or rotating by the action of the spring C on the axis of said arm. When, however, the arm F is forced back by the action of the push-rod, the arm D is gradually relieved of the pressure of said rod F, so that it moves in the direction of the arrow 2, due to the action of the spring C, and as the latter continues to exert its pressure the roller E rides on the

arm F, and as it approaches the upper end of the latter the power of the spring H' is overcome by the power of the spring C, whereby the arm D fully opens the door J, and the tray, with its connected parts, quickly completes a half-turn. As the roller N rides on the shoe K it receives rapid rotation and continues its motion as it emerges from the box and occupies the uppermost position, as seen in Fig. 3, the roller continuing its rotation or whirling for some time, thus adding interest to the nature of the device. As the tray moves in the direction of the arrow 3, the coin on the same loses its support and so drops into the box, and reaching the chute N passes through the throat of the same into the depository at the bottom of the case, from whence it may be subsequently removed. The door J closes before the tray fully describes its half-turn, so that the stop S on the upper end of the door is in position to limit rotation of the tray and retain it in horizontal position. In order to reset the tray, the door is opened and the tray, with its connected parts, is turned so that the arm D re-enters the box, after which the door is allowed to close, when the spring-pressed arm F bears against the roller E, thus controlling the arm D, the tray B being also held in normal position, so that another coin may be placed and rested thereon preparatory to the tripping of the tray and depositing of the coin into the box.

The roller E is preferably of the form of an animal, which, when it whirls or rotates during and after the overturning of the tray, increases the interesting nature of the device.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A toy money-box having a rotatable tray with a spring actuating the same, and provided with a depending portion and a swinging arm engaging said depending portion of the tray, and provided with a spring actuating the same, the spring of said arm being primarily superior to that of the shaft of the tray, substantially as described.

2. A box or casing having a rotatable tray mounted thereon and a spring attached to and for causing the rotation of said tray, in combination with a spring-pressed arm engaging a part of said tray, a door with which said arm is connected, and a push knob, button, or rod bearing against said arm, and by means of which said door may be opened, substantially as described.

3. A tray having an arm depending therefrom and provided with a spring-actuated shaft, in combination with a spring-pressed arm which is held against said depending arm, and means for relieving said depending arm of the pressure of the other named arm, substantially as described.

4. A rotatable tray having journaled thereon a shaft to which said tray is connected, in combination with a box on which said shaft is mounted, said box having a door, and an arm within the box connected to said door and engaging a portion of the tray, and having a spring bearing against the door, substantially as described.

5. An arm depending from a rotatable tray and a roller mounted on said arm, in combination with a box forming the bearings for the shaft of the tray, and a spring-pressed arm which bears against the arm of the tray, said spring-pressed arm being connected with a door on the side of the box, substantially as described.

6. A tray having a spring-actuated shaft, a box supporting said shaft, and an arm mounted on said tray, in combination with an arm mounted on the box and provided with a shoe upon which the roller is adapted to ride when said movable arm is released, whereby the tray is overturned and rotation imparted to the roller, substantially as described.

JAMES H. BOWEN.

Witnesses:

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