2 Sheets—Sheet 1.

F. W. SMITH.

TOY MONEY-BOX.

No. 189,907. Patented April 24, 1877.

Fig: 1.

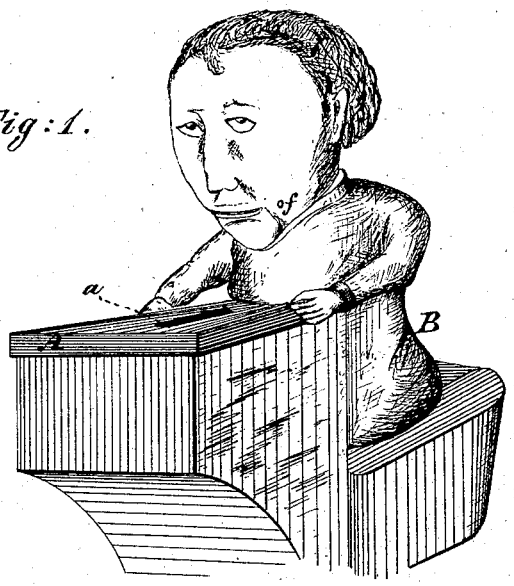
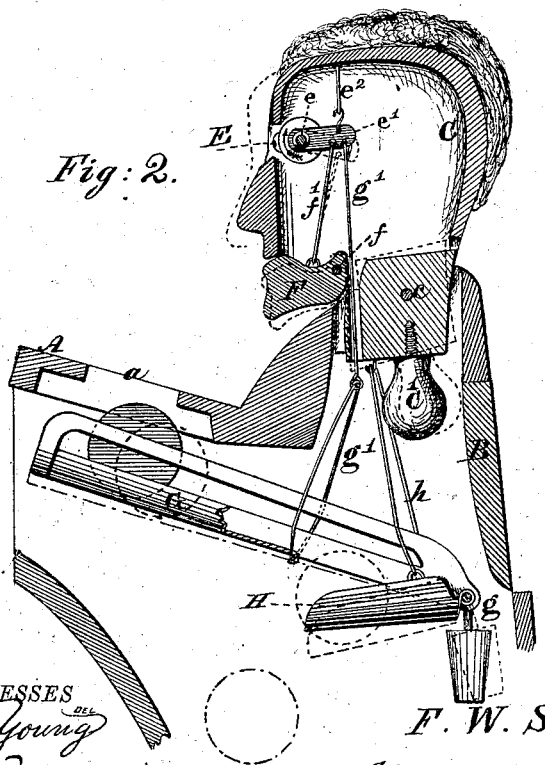


Fig: 2.



WITNESSES

H. H. Young

B. F. Morse

INVENTOR

F. W. Smith,

By his Attorney

Wm D Baldwin

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

2 Sheets—Sheet 2.

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Fig: 3.

Fig: 4.

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UNITED STATES PATENT OFFICE.

FRIEND WILLIAM SMITH, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN TOY MONEY-BOXES.

Specification forming part of Letters Patent No. **189,907**, dated April 24, 1877; application filed March 18, 1875.

To all whom it may concern:

Be it known that I, FRIEND WILLIAM SMITH, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Toy Money-Boxes, of which the following is a specification:

The invention herein claimed constitutes an improvement on the toy money-box for which Letters Patent of the United States, No. 100,564, were granted me March 8, 1870.

In that patent the descent of a coin into a box caused an image, picture, or symbol to appear through an opening in the box.

The present invention consists in a novel combination of mechanism by which the insertion of a coin into a box or receptacle causes an image or figure to roll its eyes, open its mouth, bow its head, or go through other motions calculated to please children. These motions have heretofore been produced by positive force applied to the image, as by pulling a string or pushing a lever, and not by the weight of a coin.

In the accompanying drawings, which exemplify the operation of my invention, Figure 1 is a perspective view, and Fig. 2 a vertical section, through an image having the capacity of rolling its eyes, moving its jaws, and bowing its head; Fig. 3, a side view, partly in section, of a figure which moves its eyes and head only; Fig. 4, a front view of the same, with the face partly in section to show the manner in which the movement of the eyes is effected.

In Figs. 1 and 2 an image is shown as standing behind a desk or pulpit, A, having a slit, *a*, in it for the insertion of a coin. The body B of the image is fixed, while the head C rocks on a pivot, *c*, in the neck of the image. A weight, C′, acts as a pendulum or counterpoise to keep the head in the proper position.

The eyes E of the image rock on pivots *e* in the head. An arm, e^1, connected with the rocking pivot of the eyes, extends inward into the cavity of the skull. A spring, e^2, of wire, rubber, or gutta-percha fastened to the skull of the image and to the arm e^1, serves to retain the eyes in their natural position, and to return them to it when moved by the coin, as hereinafter described.

The jaws F of the image move on pivots *f* in the head. As these pivots are, in this instance, at the back of the jaw it would naturally fall; but this is prevented by connecting the arm e^1 with the jaw by a link, cord, or wire, *f*′. The jaw and eyes are thus caused to move simultaneously.

A channel or conductor, G, moves vertically on a pivot, *g*, in the image. A cord, link, or wire, *g*′, connects this channel with the arm e^1 of the eyes, as shown in Fig. 2. Another and shorter trough, H, is also pivoted at *g* to the channel, and connected by a cord or link, *h*, with the head in front of the pivot.

The operation of this device is as follows: The coin falls through the slit *a* into the channel G. Its first impact forces the channel downward, thus drawing down the arm e^1 by the link-connection *g*′, and causing the eyes of the image to roll up. The descent of the arm e^1 also causes the jaws to drop and the image to open its mouth. The coin rolls down the channel G until it reaches a point between the links *g* and *h*, when it drops upon the trough H.

As soon as the coin drops from the channel G the spring e^2 restores the eyes and jaws to their natural position. As the coin strikes the trough H the cord *h* draws down the head and causes the image to bow, the weight C′ restoring it to its position as soon as the coin drops from the trough.

In Figs. 3 and 4 the eyes are kept horizontal by a weight, D, on their pivots, so that as the head is inclined forward the eyes appear to roll upward. The bowing, in this instance, is produced by the coin acting directly against an arm, G′, projecting from a counterbalanced head, pivoted at *c*.

It is obvious that these movements may be varied or produced by other devices equivalent to those described without departing from the spirit of my invention. For instance, the jaws might be counterbalanced like the eyes in Fig. 3, or the channel might be connected directly with the head. The arms might also be moved, or the jaws, eyes, and head might all be made to move together to produce grotesque or amusing effects, which movements would readily suggest themselves to one reading this specification.

I claim as my invention—

1. The toy money-box constructed, substantially as hereinbefore set forth, in the form of an image or figure having movable parts, limbs, or features, automatically operated by the direct action of the coin after it is inserted through an opening in the box.

2. The toy money-box hereinbefore set forth, consisting of the combination of the fixed trunk or body of an image or figure, the channel therein for the passage of a coin, and the counterpoised head rocking on a pivot in the image, whereby the head is rocked by the direct action of the coin as it passes into the box.

3. The combination, substantially as hereinbefore set forth, in a toy money-box, of the body or trunk, the pivoted channel therein, through which the coin passes, the head pivoted on the trunk or body, counterpoised eyes pivoted in the head, and links connecting the channel and eyes, whereby the direct action of the coin causes the head to bow and the eyes to roll.

4. The combination, substantially as set forth, in a toy money-box, of an image or figure having a fixed body, and movable limbs, parts, or features, a channel for the passage of the coin pivoted in or upon said body, and link-connections between said channel and the movable parts of the image, whereby the passage of the coin through the channel causes the vibration of the latter, and the consequent movements of the image.

5. The combination, substantially as set forth, in a toy money-box, of the body of the image, movable parts or features mounted thereon, the channel pivoted within the body, the independent supplementary channel pivoted therein, and link-connections, substantially such as described, connecting the channels and parts or features, respectively, whereby the direct action of the coin, in its passage into the body, causes the parts to move, as set forth.

6. The combination, substantially as hereinbefore set forth, in a toy money-box, of a fixed body, the head pivoted thereon, eyes pivoted in the head, the hinged jaw, the vibrating channel through which the coin passes, and the links connecting the channel, the head, the jaw, and the eyes, substantially as set forth, whereby the bowing of the head produces the movement of the eyes and jaw, as set forth.

7. The combination, substantially as set forth, in a toy money-box, of a vibrating channel, pivoted eyes and jaw, link-connections, and the retracting-spring, whereby the parts are restored to the normal position after the passage of the coin.

In testimony whereof I have hereunto subscribed my name.

FRIEND WILLIAM SMITH.

Witnesses:
ISAAC L. FERRIS,
OLLIE C. SMITH.