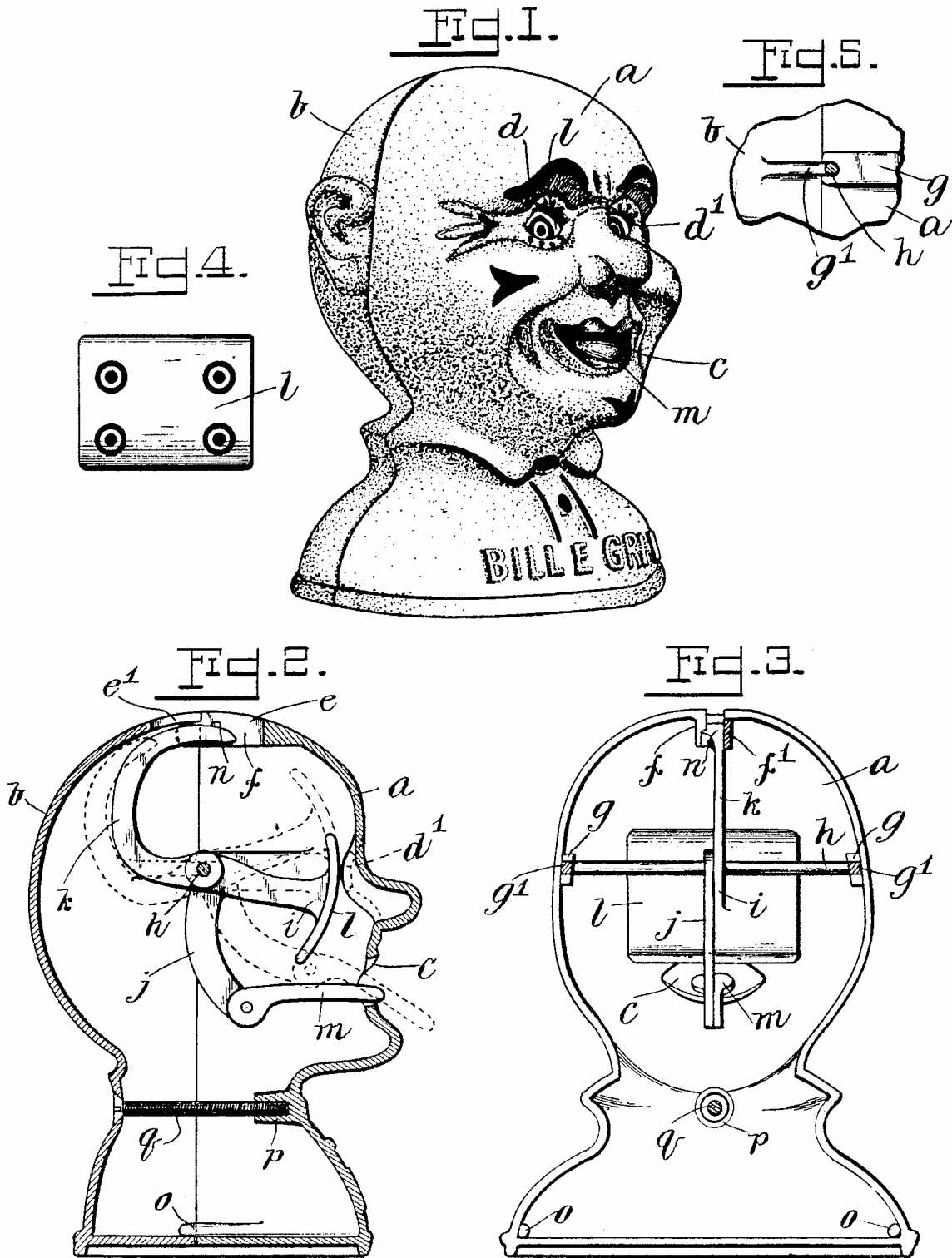


1,147,978.

Patented July 27, 1915.



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UNITED STATES PATENT OFFICE.

JOHN W. SCHMITT, OF NEW YORK, N. Y.

TOY BANK.

1,147,978.

Specification of Letters Patent.

Patented July 27, 1915.

Application filed November 24, 1914 Serial No. 873,681.

To all whom it may concern:

Be it known that I, JOHN W. SCHMITT, a citizen of the United States, residing at the borough of Brooklyn, in the city of New York, county of Kings, and State of New York, have invented certain new and useful Improvements in Toy Banks, of which the following is a specification, reference being had therein to the accompanying drawings, which form a part thereof.

My invention relates to toy banks and more particularly to a type of non-registering banks having movable parts adapted to be actuated by a coin inserted therein for the purpose of affording amusement.

In toy banks of the type to which my invention relates, the object sought to be attained is the encouragement of the habit of saving in the young by providing a bank structure, the operation of which, upon the insertion of a coin therein, will be amusing or grotesque.

A bank made in accordance with my invention embodies a casing so constructed as to simulate the head and shoulders of a human being, and having mounted therein a simple mechanism which will, when a coin is deposited in the bank, be so actuated as to simultaneously change the expression of the eyes and project the tongue in a manner to amuse, and to arouse the interest of the user. The arrangement of the mechanism is such that the effect produced will vary in accordance with the sizes of different coins deposited. The mechanism for actuating the tongue and eyes, is simple in design, may be readily assembled in the bank casing, and, in addition to securing the effect of a change in facial expression of the casing, will protect the coin slot and the mouth opening in a manner to prevent the removal of coins from the bank there-through. The various parts are overbalanced in such a way as to dispense with the use of springs and hence the mechanism cannot be so disarranged as to clog the coin slot or permit the coin to be withdrawn there-through.

A bank made in accordance with my invention may be inexpensively produced, is attractive in appearance and affords considerable amusement when a coin is deposited therein.

The invention consists primarily in a toy bank embodying therein an outer casing simulating the head of a human being, hav-

ing a plurality of openings indicating an open mouth, and eye-sockets, and a slot adapted to receive a coin, a rock-shaft mounted within said casing having three divergent arms, a segmental plate located adjacent the eye-socket openings, carried by one of said arms, said plate having indicated thereon a plurality of pairs of eye-balls, a flap simulating the human tongue pivotally mounted upon another of said arms, and projecting through said mouth opening, a cam carried by the remaining arm and extending along and closing a portion of said slot and means limiting the oscillatory movement of said shaft; and in such other novel features of construction and combination of parts as are hereinafter set forth and described and more particularly pointed out in the claims hereto appended.

Referring to the drawings,

Figure 1 is an elevation in perspective of a bank embodying my invention; Fig. 2 is a longitudinal vertical section therethrough; Fig. 3 is a cross-section thereof; Fig. 4 is a detail view of the eye-plate; and Fig. 5 is a detail view of a portion of the casing showing one of the bearings for the rock-shaft.

Like letters refer to like parts throughout the several views.

In the embodiment of my invention shown in the drawings, the bank casing is composed of two sections *a-b* which together simulate the human head. One of these sections as *a* is provided with an opening *c* forming a mouth opening, and a plurality of openings *d-d'* representing the eye-sockets of the said head. The joining edges of the sections *a-b* preferably at the top thereof, are provided with angular recesses *e-e'* adapted, when the two sections are assembled, to form a slot through which coins of different denominations may be deposited in the bank. The sections *a-b* upon opposite sides of the slot section thereof are provided with projecting tongues *f-f'* which tongues are adapted to project beyond their respective casing section, and within the other section and thus form a continuous guide-way adjacent said slot within said casing, and also a stop shoulder, the purpose of which will more fully appear hereinafter. The section *a* upon each side thereof is also provided with a slotted boss *g* forming a part of a bearing for a rock-shaft *h* which carries the movable parts of the bank mech-

anism. The section *b* is provided on each side thereof with a tongue *g'* adapted to enter the slot of the cooperating boss *g* and complete the bearing for said shaft.

5 The shaft *h* has mounted thereon, and movable therewith, three arms *i—j—k* arranged at substantially 90° apart. The arm *i* has mounted thereon a segmental plate *l* which is supported in close proximity to the front wall of the casing *a* in a manner to close the eye-socket openings *d—d'*. The arm *j* has pivotally connected therewith one end of a flap *m* so formed as to simulate the human tongue; the other end of said flap normally projecting partially through and resting upon the mouth opening *e*. The third arm *k* is provided with a cam *n* projecting along and closing a portion of the coin slot *d—d'*. This cam *n* has a laterally projecting shoulder *m'* adapted to abut against the end of one of the tongues *f—f'*, and thus limit the oscillatory movement of the shaft *h* in one direction.

25 The various arms *i—j—k* and the parts carried thereby, are so overbalanced by the plate *l* as to normally maintain the parts in the position shown in full lines in Fig. 2.

One of the sections, as *a*, is provided with tongues *o* at opposite sides of the bottom thereof to facilitate the assembling of these two sections.

Suitable means by which the bank may be opened for the purpose of permitting the removal of the coins are provided; this means, in the form of the invention shown in the drawings, being the screw threaded boss *p* carried by the section *a*, and the screw *q* passing through an opening in, and engaging, the section *b* cooperating with the screw threads in said boss. Any other desired means for opening the bank may, however, be provided without departing from my invention and the means for securing said sections *a—b* together may be modified as required by the particular manner utilized for permitting the opening of the bank.

The operation of the herein described bank is substantially as follows: As a coin is inserted through the coin slot *e—e'*, the edge of the coin will engage the cam *n* and through the arm *k* oscillate the shaft *h* to an extent determined by the diameter of the coin inserted. When the greatest diameter of the coin passes said cam, it drops into the casing *a—b*. With the oscillation of the shaft *h*, the plate *l* is raised through the oscillation of the arm *i*, and the tongue flap *m* is thrust downwardly through the mouth opening *e* under the contact of the arm *j*. The location of the plate *l* will cause it to act as a deflector so that if a coin should strike the rock-shaft *h* and bound toward the front of the casing *a*, it would strike the bottom of this plate and be thrown backwardly in the

casing, thus avoiding its escape through the mouth opening *e*. The pivotal connections between the tongue flap *m* and the arm *k* cause a roll to the tongue as it is projected through the opening *e*. As the plate *l* is oscillating, the position of the eye-balls indicated thereon will be varied in relation to the eye-socket openings *d—d'*, the extent of said variation being determined by the diameter of the coin inserted. If a one cent piece be inserted in the slot the upper part indicating the eye-balls will be elevated and a plain portion of the plate will be exposed, thus giving the appearance of merely closing the eyes. Meanwhile, the tongue flap *m* will be projected but slightly. If a dime be inserted the eyes will roll up and the tongue will be but slightly projected. If a five cent piece be inserted, the lower set of eye-balls will be exposed toward the bottom of the eye-sockets and the tongue will be projected to a greater extent. While, if a quarter be inserted, the lower set of eyes will be brought in full view, raised slightly so as to give the effect of surprise and the tongue will be projected to its full extent. By varying the arrangement of the indicated eye-balls upon the plate, various effects may be secured all of which, however, will be similar in the respect that there will be a simultaneous projection of the tongue and movement of the eyes simultaneously therewith.

In the form of the invention shown, the casing *a* is so modeled as to give a normal pleased expression to the face, the general effect of this expression, however, being varied by the movement of the plate *l* and tongue flap *m*.

Immediately upon the escape of a coin passed the greatest diameter of the coin slot, there is a tendency of the rock-shaft *h* to return to its normal position, which tendency is sufficiently great to cause the cam, in acting upon the upper periphery of the coin, to force the coin from the fingers.

It will be observed that the arm *k* carrying the cam *n* projects rearwardly of the casing so as to secure the desired direction of movement of all of the parts carried by the shaft *h*. It will also be observed that said cam has movement in the way formed by the projections *f—f'* and that one of these projections by reason of the engagement therewith of the shoulder *n* on said cam, fixes the normal position of the shaft and the parts controlled thereby.

By providing a bearing formed of the slotted boss *g* carried by one section of the casing and the cooperating tongue *g'* carried by the other section thereof, all of the movable parts may be readily assembled in the section *a* and the other section *b* may be assembled in the structure without likelihood of disturbing the relation of parts and when so assembled will maintain this relation.

In the form of the invention shown, to open the bank it is necessary to merely remove the screw *g*, thus permitting the separation of the sections *a-b*. Even though in the hands of an unskilled person this separation of the section might lead to the escape of the shaft *h* from its bearing, nevertheless, the manner of mounting, this mechanism, and of assembling the device, is so simple that no difficulty would be encountered by even the most unskilled, in assembling the device.

The different arcs described by the arms *i* and *j* and the manner of mounting the flap *m* on the latter, will cause the plate *l* to have a relatively greater movement than the said flap *m*.

It is not my intention to limit the invention to the precise details of construction shown in the accompanying drawings, it being apparent that such may be varied without departing from the spirit and scope of the invention.

Having described the invention, what I claim as new and desire to have protected by Letters Patent is:—

1. A toy bank embodying therein a casing simulating the head of a human being, said casing having therein a plurality of openings indicating respectively an open mouth and eye-sockets, and a slot adapted to receive a coin, a shaft mounted within said casing, three divergent arms carried by said shaft, said arms being operatively connected whereby they will have simultaneous movement, a segmental plate carried by one of said arms and located adjacent said eye-socket openings, said plate having therein a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said openings, a flap simulating the human tongue pivotally mounted upon another of said arms and normally projecting into, and resting upon the edge of, said mouth opening, a cam carried by the remaining arm and extending along and closing, a portion of said coin slot, and means limiting the oscillatory movement of said arms.

2. A toy bank embodying therein a casing simulating the head of a human being, said casing having therein a plurality of openings indicating respectively an open mouth and eye-sockets, and a slot adapted to receive a coin, a shaft mounted within said casing, parallel projections carried by said casing on opposite sides of said coin slot whereby a way is formed within said casing and below said slot, three divergent arms carried by said shaft, said arms being operatively connected whereby they will have simultaneous movement, a segmental plate carried by one of said arms and located adjacent said eye-socket openings, said plate having therein a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said openings, a flap simulating the human tongue pivotally mounted upon another of said

balls adapted to be successively brought in a position where they will be exposed through said eye-socket openings, a flap simulating the human tongue pivotally mounted upon another of said arms and normally projecting into, and resting upon the edge of, said mouth opening, a cam carried by the remaining arm projecting into said way and closing a portion of said coin slot, and means limiting the oscillatory movement of said arms.

3. A toy bank embodying therein a casing formed of two separable sections and simulating a human head, said casing having therein a plurality of openings indicating respectively an open mouth and eye sockets, and a slot adapted to receive a coin, oppositely disposed slotted bosses on one of said sections, oppositely disposed tongues adapted to enter the slot in said bosses respectively on the other section, a shaft having its end mounted in bearings formed by said bosses and said tongues, three divergent arms carried by said shaft, said arms being operatively connected whereby they will have simultaneous movement, a segmental plate carried by one of said arms and located adjacent said eye-socket openings, said plate having indicated thereon a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said eye-socket openings, a flap simulating the human tongue pivotally mounted upon another of said arms and normally projecting into, and resting upon the edge of, said mouth opening, a cam carried by the remaining arm and extending along and closing a portion of said coin slot, and means limiting the oscillatory movement of said arms.

4. A toy bank embodying therein a casing formed of two separable sections and simulating a human head, said casing having therein a plurality of openings indicating respectively an open mouth and eye-sockets, and a slot adapted to receive a coin, oppositely disposed slotted bosses on one of said sections, oppositely disposed tongues adapted to enter the slots in said bosses respectively on the other section, a shaft having its end mounted in bearings formed by said bosses and said tongues, parallel projections carried by said casing on opposite sides of said coin slot whereby a way is formed within said casing and below said slot, three divergent arms carried by said shaft, said arms being operatively connected whereby they will have simultaneous movement, a segmental plate carried by one of said arms and located adjacent said eye-socket openings, said plate having indicated thereon a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said eye-socket openings, a flap simulating the human tongue pivotally mounted upon another of said

arms and normally projecting into, and resting upon the edge of, said mouth opening, a cam carried by the remaining arm projecting into said way and closing a portion of said coin slot, and means limiting the oscillatory movement of said arms.

5. A toy bank embodying therein a casing formed of two separable sections and simulating a human head, said casing having therein a plurality of openings indicating respectively an open mouth and eye-sockets, and a slot adapted to receive a coin, oppositely disposed bosses on one of said sections, oppositely disposed tongues respectively on the other section, a rock-shaft having its end mounted in bearings formed by said bosses and said tongues, parallel projections carried by said casing on opposite sides of said coin slot whereby a way is formed within said casing and below said slot, three divergent arms carried by said

shaft, said arms being operatively connected whereby they will have simultaneous movement, a segmental plate carried by one of said arms and located adjacent said eye-socket openings, said plate having indicated thereon a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said eye-socket openings, a flap simulating the human tongue pivotally mounted upon another of said arms and normally projecting into, and resting upon the edge of, said mouth opening, a cam carried by the remaining arm projecting into said way and closing a portion of said coin slot, and means limiting the oscillatory movement of said arms.

In witness whereof I hereunto affix my signature in the presence of two subscribing witnesses, this 19th day of November, 1914.

JOHN W. SCHMITT.

Witnesses:

F. T. WENTWORTH,

CLARICE FRANK.

shaft, carried by and movable with said said arms and located adjacent said eye-socket openings, said plate having indicated thereon a plurality of eye-balls adapted to be successively brought in a position where they will be exposed through said eye-socket openings, a flap simulating the human tongue pivotally mounted upon another of said arms and normally projecting into and resting upon the edge of, said mouth opening, a cam carried by the remaining arm projecting into said way and closing a portion of said coin slot, and means limiting the oscillatory movement of said arms.

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