April 7, 1925.

1,532,424

L. MARX

TOY SAVINGS BANK

Filed Oct. 19, 1922

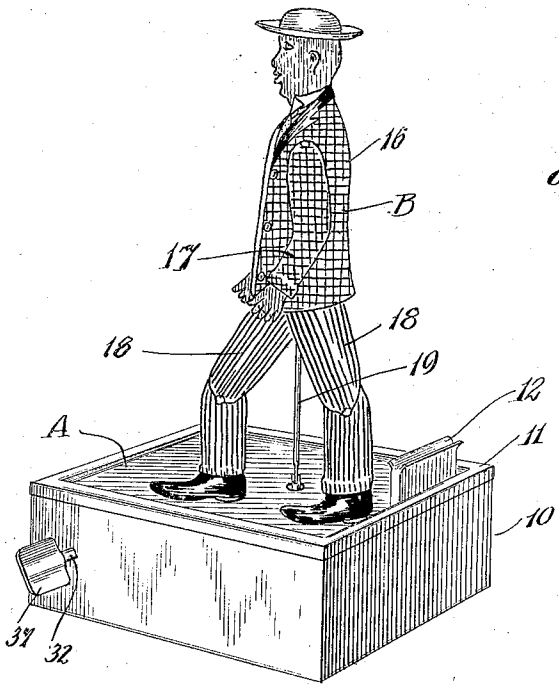


Fig. 1.

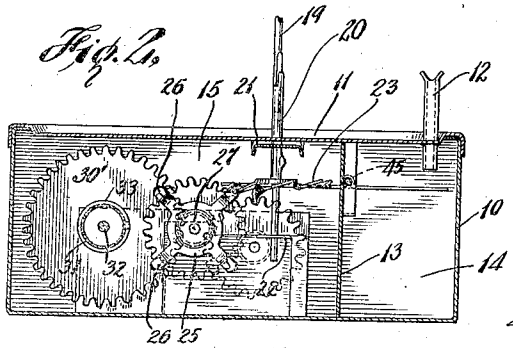


Fig. 2.

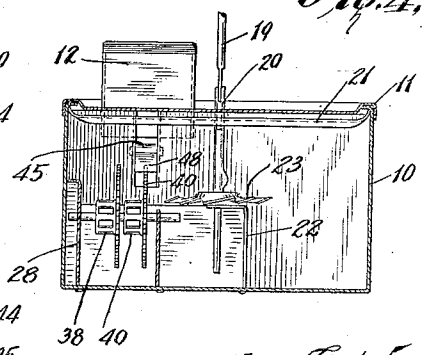


Fig. 4.

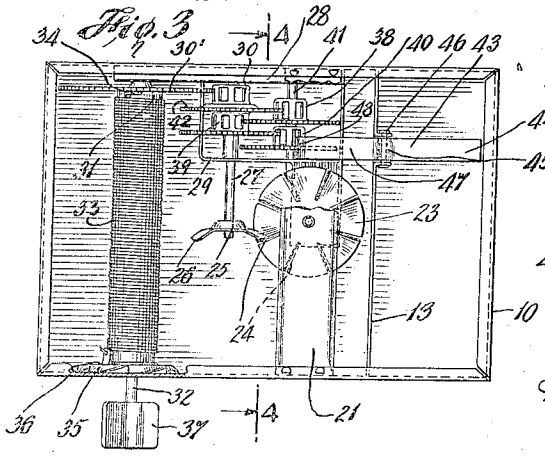


Fig. 3.

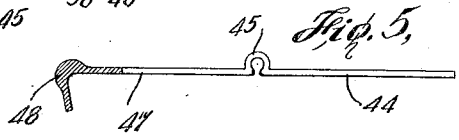


Fig. 5.

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UNITED STATES PATENT OFFICE.

LOUIS MARX, OF NEW YORK, N. Y.

TOY SAVINGS BANK.

Application filed October 19, 1922. Serial No. 595,552.

To all whom it may concern:

Be it known that I, LOUIS MARX, a citizen of the United States, and resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Toy Savings Banks, of which the following is a specification.

This invention relates to a combined toy and savings bank, and more particularly to a toy bank for children designed to supply an incentive for saving; and has special reference to the provision of a toy savings bank in which amusement is offered as the stimulus to the creation of habits of thrift.

A prime desideratum of my present invention comprehends the provision of an amusement bank constructed and designed so that the insertion or depositing by a child of a coin in the bank receptacle will set an amusement device into activity. It is a well known fact that children keenly enjoy the act of depositing coins in slots or chutes, and experience a profound sense of delight in witnessing the motions of an automaton set into action thereby. By my present invention, I propose to utilize and take advantage of these elemental attractions of the coin slot and the mechanical action, which are of such absorbing interest to children, to create or stimulate an interest or incentive in saving and thrift, a principal object of my invention comprising the provision of a child's bank in which an amusement device, such as a mechanical toy, is set into activity by the act of depositing money in the bank receptacle.

It is a further principal object of my present invention to provide an amusement bank of simple construction in which the amusement device is normally locked against action, and in which the depositing of a coin in the bank receptacle sets the amusement device into activity for a given time for the rendition of some act or performance, as for example, a dancing or "jigging" act, after which the device is automatically relocked, necessitating the insertion of another coin if an additional performance is desired, the whole cooperating to produce an inexpensive child's coin-operated mechanical bank.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, my invention consists in the elements and their relation one to the other, as hereinafter particularly described and sought to be defined in the claims, reference being had to the accompanying drawings which show a preferred embodiment of my invention and in which:

Figure 1 is a perspective view of my amusement bank,

Fig. 2 is a front cross-sectional view thereof, with parts removed,

Fig. 3 is a top plan view thereof with parts removed and other parts shown in section,

Fig. 4 is a view taken in cross-section on the line 4—4, Fig. 3, and

Fig. 5 is a view of a detail.

Referring now more in detail to the drawings, in which I have exemplified a preferred embodiment of my invention, the amusement bank comprises the savings receptacle A adapted for receiving coin deposits, and an amusement device such as the figure B associated therewith in such manner that when a coin is deposited in the savings receptacle A the figure B is set in motion to perform some act of amusement, such as a dancing or "jigging" act.

The savings receptacle A in the preferred construction comprises a body 10 and a removable cover 11, the said cover forming a platform or stage for the figure B, and being provided with a coin chute or slot 12, and the body 10 being subdivided by a partition 13 into a compartment 14 for receiving coins deposited through the coin slot 12, and a compartment 15 for housing the operative mechanism for the figure B as will be described hereinafter.

The dancing figure B comprises a body 16 provided with the movable arms 17 and the loosely jointed lower limbs 18 operatively supported on a rod 19, and so movably related to the platform 11 that when the figure is reciprocated with an ascending or descending motion and rotated about the platform 11, the joints of the lower limbs are broken and the movement of the body and arms synchronized therewith to produce a dancing or "jigging" act.

For effectuating the desired reciprocating and rotating motion of the figure B and the rod 19, there is provided a slide rod 20 mounted for slidable motion in the spaced bracket supports 21 and 22, the said slide rod carrying a rotor 23 provided with a

plurality of vanes or blades defining the radial slots 24. Cooperating with the rotor 23, I provide an actuating disk 25 including a plurality of radially arranged fingers 26, each of the said fingers being forwardly bent as clearly shown in Fig. 3 of the drawings, so that upon rotation of the actuating disk 25 the fingers will successively engage the rotor 23 to impart reciprocating motion to the same and will successively ride in the radial slots 24 to impart rotative motion to the rotor.

For operating the actuating disk 25, the said disk is fixed on a shaft 27 journalled in a rear supporting plate 28 and in a bracket 29, the said shaft fixedly carrying a pinion 30 meshing wth a drive gear 30', fixed to a drum 31, the latter being loosely rotatable on a shaft 32 journalled in the front of the receptacle 10 and in the rear supporting plate 28. The drum 31 comprises a motor drum on which is wound the spring motor 33, one end of which is anchored to the drum as at 34, the other end of said spring being anchored to a ratchet wheel 35 freely rotatable on the drum 31, the said ratchet wheel being fixed to the shaft 32. Cooperating with the ratchet wheel 35, there is provided a spring checking pawl 36 which cooperates with the ratchet wheel to permit rotation of the latter in only one direction, the cooperation being such that upon rotation of a winding key 37 fixed to the shaft 32, the spring motor 33 will be energized or wound for effecting actuation of the rotor 23 and the dancing figure operated thereby.

For braking the action of the motor so as to permit the same to be wound and so as to normally lock the same against action, I provide a braking mechanism releasable by the depositing of a coin in the bank receptacle and automatically resettable so that after the dancing act has been performed the further depositing of a coin will be necessitated before an additional performance can be rendered. This braking mechanism in the preferred construction includes the provision of a train of gears operated by the motor with a checking element normally engaging the teeth of one of the gears, the construction being such that when the checking element is released and the same disengaged from the gear, the momentum imparted to the gear by the motor will maintain the checking element out of braking action until the activity of the gear is decreased by the deenergization of the motor, reengagement and resetting of the brake then taking place. To these ends, I provide the gear train including the three combined gears and pinions 38, 39 and 40, the gear and pinions 38 and 40 being loosely mounted on a shaft 41, and the gear and pinion 39 being loosely mounted on the shaft 27, the said gear train being driven from a gear 42 which may be formed integral with the driven pinion 30. Cooperating with the teeth of the gear pinion 40, I provide the checking element which preferably comprises a lever 43, the said lever including a coin actuated arm 44 arranged below the slot or chute 12, a hub 45 oscillatable in a bearing 46 formed in the partition 13, and an arm 37 provided with a weighted finger 48 arranged to engage the teeth of the gear 40, the construction being such that the lever 43 is normally biased into position for engaging the said gear. With this construction, it will be seen that under normal conditions with the checking element 43 engaging the gear 40, the winding key 37 may be rotated to energize the motor 33, and when a coin is deposited in the chute 12 the said coin will drop upon the arm 44 to cause the checking finger 48 to disengage the gear 40 for releasing the motor to set the same into operation. Due to the ratio of gearing provided the gear 40 rotates speedily and the momentum thereof prevents the finger 48 from reengaging the same, reengagement taking place only upon decreased activity of the motor mechanism.

The operation of my thrift stimulating amusement bank will in the main be apparent from the above detailed description thereof. It will be apparent that the dancing figure B is incapable of being set into motion except by the depositing of money in the bank receptacle, and that when a coin is so deposited the figure will be set into activity until decreased energization of the motor produces a checking of the activity thereof and a locking of the same against further operation. Thus for each performance a new deposit must be made and each deposit is attended with an amusement which creates an interest in saving.

While I have shown my device in the preferred form, it will be obvious that many changes and modifications may be made in the structure disclosed without departing from the spirit of the invention, defined in the following claims.

I claim:

1. A toy savings bank comprising a savings receptacle, an amusement device carried thereby, a motor housed by the receptacle and connected to operate said device, mechanism for energizing said motor and a brake means for the motor normally set in braking condition and releasable by the depositing of a coin in the receptacle, said brake means and motor being inter-related so that the brake means when released is held out of braking action by the operation of the motor, and is self-resettable into braking condition when the motor is deenergized.

2. A toy savings bank comprising a savings receptacle, a dancing figure carried thereby, a spring motor including a gear

train housed by the receptacle and connected to operate the figure, mechanism for winding the motor, and a brake means for said motor comprising an element normally biased for engagement with the teeth of a gear of said gear train and releasable by depositing a coin in the receptacle, said element and gear being inter-related so that the element when so released is held out of engagement with the gear by motion of the latter and is permitted to re-engage the gear upon decreased activity of the latter.

3. In a toy, an amusement device, a motor therefor, mechanism for energizing the motor, and a releasable brake means for the motor normally set in braking condition, said brake means and motor being inter-related so that the brake means when released is held out of braking action by the operation of the motor, and is self-resettable into braking action when the motor is deenergized.

4. In a toy, an amusement device, a spring motor including a gear train therefor, mechanism for winding the motor, and a brake means for the motor comprising a releasable lever normally biased for engagement with the teeth of a gear of said gear train, said lever and gear being inter-related so that the lever when so released is held out of engagement with said gear by momentum of the latter and is permitted to re-engage the gear upon decreased activity of the latter whereby the brake means is self-resettable after the operation of the amusement device.

Signed at New York city in the county of New York and State of New York this 18th day of October, A. D. 1922.

LOUIS MARX.