

April 12, 1938.

J. GRAUER

2,114,167

TOY REGISTER BANK

Filed May 29, 1936

2 Sheets-Sheet 1

FIG. 1.

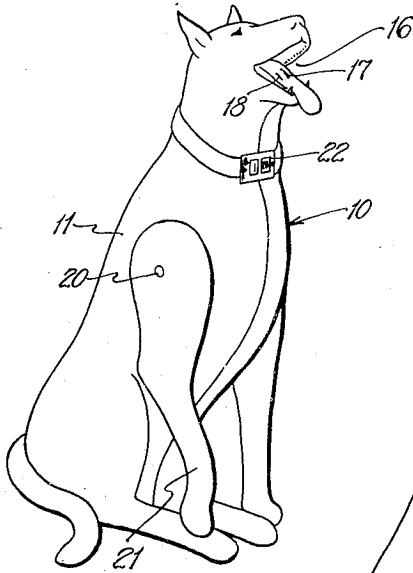


FIG. 2.

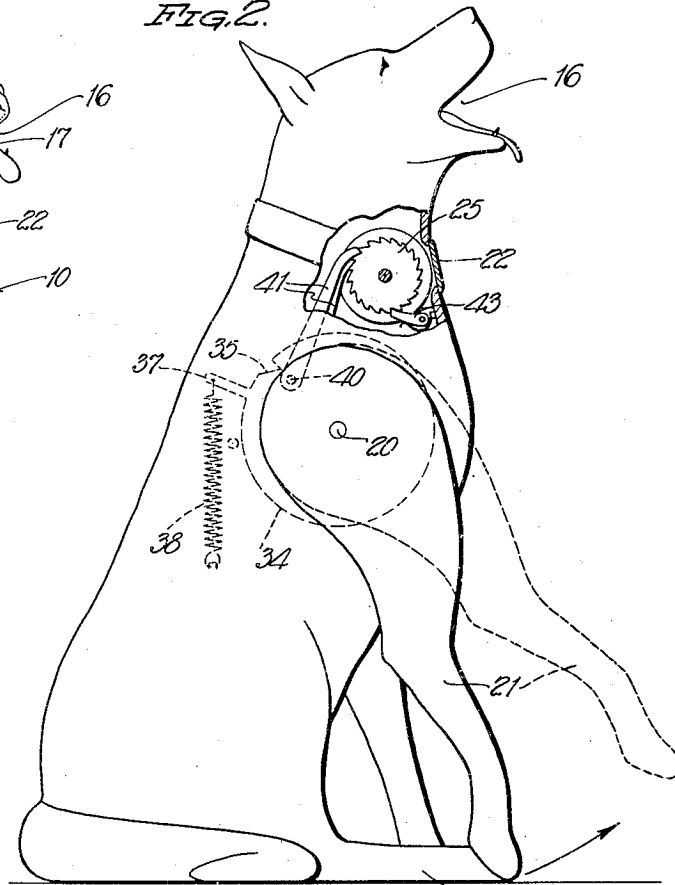


FIG. 5.

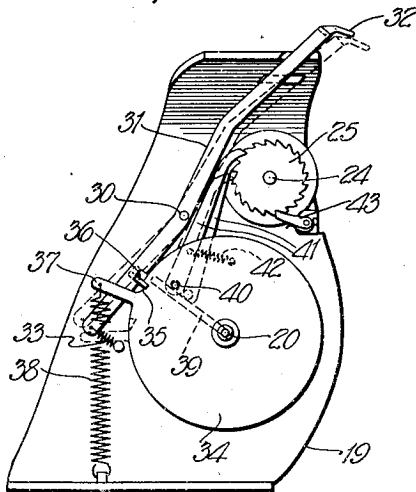
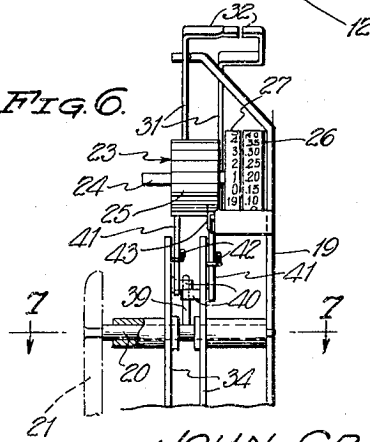


FIG. 6.



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WITNESS:

E. M. ...

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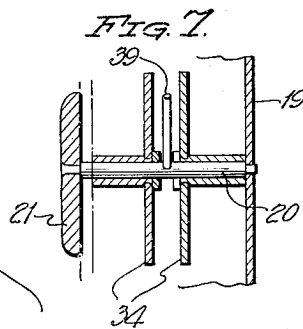
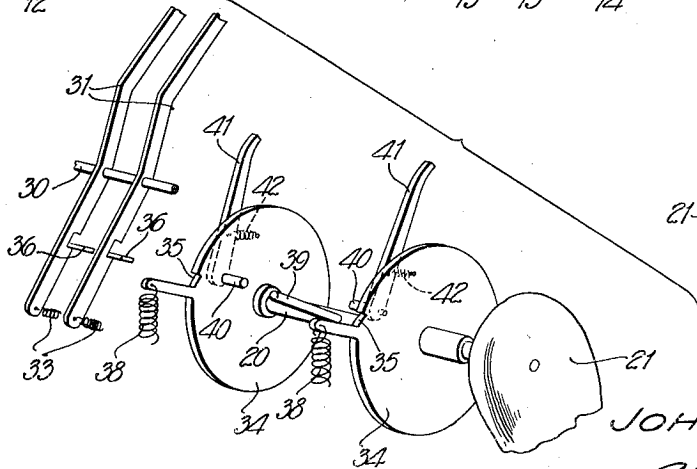
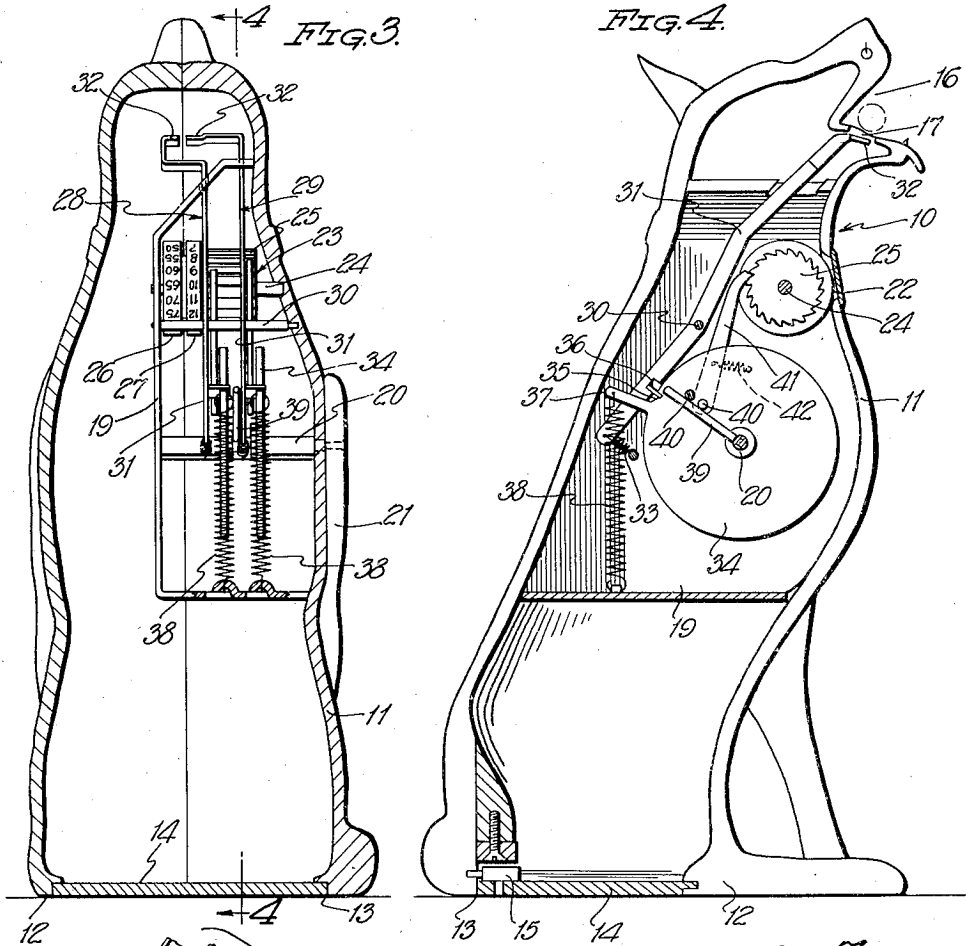
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TOY REGISTER BANK

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2 Sheets-Sheet 2



WITNESS:

H. A. ...

FIG. 8.

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UNITED STATES PATENT OFFICE

2,114,167

TOY REGISTER BANK

John Grauer, Little Neck, Long Island, N. Y.

Application May 29, 1936, Serial No. 82,395

7 Claims. (Cl. 235—100)

This invention relates to improvements in toy register banks.

One of the main features of the invention resides in a toy register bank in the form of a toy figure to which an animate action is imparted upon the depositing of a coin into the bank. Such novel action will be inducive to saving on the part of the owner of the bank, for such owner will be amused by the animate action and will be induced to insert coins into the bank for his amusement or for the amusement of others.

Another feature of the invention is to provide a toy bank having the above amusing characteristics which also registers upon each deposit of a coin, the total amount of money contained within the bank.

A further feature of the invention is the provision of a toy register bank wherein the insertion of a coin into the bank causes a toy animal to appear lifelike, for instance, a toy dog will automatically lift a front leg in the manner of a live dog offering a paw, whereby the operator may grasp the leg and manually depress the same to normal lowered position, which manual return movement of the animate member or leg effects an operation of the registering mechanism.

Another feature of the invention is to provide an animate toy register bank which is simple and inexpensive of construction, and amusing and positive in its action.

With these and other objects in view, the invention resides in the certain novel construction, combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of my toy register bank with parts in normal position.

Figure 2 is a side elevational view with parts broken away and shown in section, the animate member of the toy being shown in normal lowered position in full lines, and in raised position in dotted lines.

Figure 3 is a vertical transverse sectional view looking toward the front.

Figure 4 is a vertical longitudinal sectional view on the line 4—4 of Figure 3.

Figure 5 is a side elevational view of the register mechanism per se.

Figure 6 is a fragmentary front elevational view of the register mechanism.

Figure 7 is a detail horizontal sectional view on the line 7—7 of Figure 6.

Figure 8 is a collective perspective view of the

register actuating mechanism with the parts in separated drawn out relation.

Referring to the drawings by reference characters, the numeral 10 designates my toy register bank in its entirety which includes a hollow body 11 in the shape of a dog in a sitting posture, although other toy figures may be resorted to if desired, without departing from the spirit of the invention.

The hollow body 11 is provided with a flat base 12 having a coin release opening 13 normally closed by a removable plate 14 which is locked in position by a key actuated lock 15. The toy figure of the dog is provided with an open mouth 16 adjacent the top of the body and the lower wall of the mouth is provided with a pair of spaced coin slots 17 and 18 adapted to respectively receive coins of five and ten cent denominations. Whereas I have specifically mentioned the toy bank as receiving coins of five and ten cent denominations, it will be understood that the same may be designed for the accommodation of coins of greater or less denominations if desired.

Mounted within the hollow body 11 and supported from one of the side walls thereof, is a frame 19 and journaled within the frame and extending beyond one side wall of the hollow body is a shaft 20 to the outer end of which is fixedly secured a member 21 in the form of the fore legs of a dog.

The front wall of the body 11 is provided with a sight opening 22 and mounted within the hollow body in line with the sight opening is a register mechanism 23. The register mechanism 23 includes a shaft 24, one end of which is journaled in the frame 19 and the other end in the adjacent side wall of the body. Fixed to the shaft 24 is a ratchet wheel 25 and a number drum 26. The numbers on the periphery of the drum range from five to ninety-five in consecutive multiples of five and constitute the "cents" total. Rotatably mounted upon the shaft 24 and interposed between the ratchet wheel 25 and the drum 26, is a tens indicator drum 27, the numbers on the periphery being indicative of "dollars". Any form of transfer mechanism may be provided between the "cents" drum 26 and the "dollars" drum 27, for such mechanisms are well known in the register art. The numbers on the two drums horizontally aline and are readable through the sight opening 22.

For the purpose of imparting an animate action to the leg member 21 and for actuating the register mechanism 23, I provide two separate mech-

anisms 28 and 29 for operation by coins of five and ten cent denominations inserted through the coin slots 17 and 18. The mechanisms 28 and 29 are substantially identical in construction with the exception that the mechanism 29 is adapted to actuate the ratchet wheel 25 a further distance than the mechanism 28 in order that the totalizer drum 26 may move a further distance which is necessary to register a deposit of ten cents than the distance it moves for the registering of a coin of a five cent denomination. It is therefore believed that a description of one of the coin actuated mechanisms will suffice for the other.

As above stated, the actuating mechanisms 28 and 29 are substantially identical and whereas I shall specifically describe the actuating mechanism 28 operable upon the insertion of a coin in the slot 17, the same reference characters identify like parts in the mechanism 29. Mounted in the frame 19 and extending transversely thereof is a fixed shaft 30 on which an actuating lever 31 is freely mounted, the upper end of the lever being provided with an angularly bent portion 32 which is disposed adjacent coin slot 17 so as to be disposed in the path of a coin inserted through the said slot. The lower end of the lever 31 is under the influence of a spring 33 for the purpose of placing a tension upon the lever 31 to normally hold the upper angular end 32 of the lever in alinement with the coin slot 17.

Fixed to the shaft 20 and disposed within the hollow body is a disk 34 having a tooth 35 in the periphery thereof which is normally engaged by a pawl 36 carried by the lower end of the lever 31. Extending from the periphery of the disk 34 is an arm 37 to which one end of a spring 38 is connected, the other end of the spring being attached to the bottom of the frame 19. From the description thus far, it will be seen that the spring 38 tends to move the disk 34 in one direction but such movement is prevented by engagement of the pawl 36 with the tooth 35. With these parts in the position just stated, the leg member 21 is in lowered position as best seen in Figure 4 of the drawings.

Extending radially from the shaft 20 is an arm 39 which is disposed in the path of a pin 40 extending from one side of the disk 34. Pivoted to one side of the disk 34 is one end of a ratchet pawl 41, the bill end of which is held against the ratchet wheel 25 of the register mechanism by means of a spring 42. For the purpose of preventing retrograde movement of the ratchet wheel 25 during the idling action of the pawl 41, there is provided a spring actuated pawl 43 carried by the frame structure 19 and as illustrated in Figure 5 of the drawings.

By reference to Figure 5 of the drawings, it will be noted that the actuating pawl 41 of the register actuating mechanism 29 for the recording of a coin of a ten cent denomination is slightly longer than the pawl 41 of the register actuating mechanism 28 and is so connected to its related disk 34 that it has a longer range of movement for the purpose of turning the drum 26 twice the distance as the mechanism for the registering of a coin of a five cent denomination.

In operation, assume that the parts are in the position shown in full lines throughout the several views of the drawings, and a coin of a five cent denomination is inserted into the coin slot 17. The coin is forced past the angular end 32 of the lever 31, thus causing a rocking

movement to be imparted to the lever which in turn causes the pawl 36 to be disengaged from the tooth 35 of the disk 34. The spring 38 thereupon imparts rotation to the disk 34 which in turn rotates the shaft 20 and moves the leg 21 to a raised position as shown in dotted lines in Figure 2 of the drawings. During movement of the leg 21 to raised position, the ratchet pawl 41 has moved downwardly in idle relation to the ratchet wheel 25 and as yet, the register mechanism has not been operated. When the leg 21 is in raised position, it resembles a real dog offering its paw and when in such position, the operator grasps the leg member 21 and imparts a downward return movement thereto, which movement causes the arm 39 to engage the pin 40 to turn the disk 34 against the action of the spring 38, and which upward movement causes the pawl 41 to actuate the ratchet wheel 25 and in turn rotate the totalizer drum 26 a distance equal to that between the respective numbers contained on the periphery of the totalizer drum. As the leg 21 reaches the limit of its downward movement, the spring 33 causes the pawl 36 on the lever 31 to again engage with the tooth 35, thereby resetting the mechanism for subsequent operation. After the coin is inserted through the coin receiving slot, it drops clear of the actuating mechanism to the bottom of the hollow body.

Whereas I have described the operation of the toy bank upon the insertion of a coin of a five cent denomination into the coin slot 17, it will be understood that a similar operation takes place upon the insertion of a coin of a ten cent denomination in the coin slot 18 by reason of a similar actuation which is imparted to the actuating mechanism 29.

By reason of the animate actions which are imparted to the toy figure upon the insertion of a coin therein, it will be appreciated that such actions are inducive of saving on the part of the owner in view of the amusing characteristics of the toy figure.

While I have shown and described what I consider to be the most practical embodiment of my invention, I wish it to be understood that such changes and alterations as come within the scope of the appended claims may be resorted to if desired.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A toy bank comprising in combination, a hollow body having a coin slot therein, a member pivoted to said body exteriorly thereof for up and down swinging movement, spring means tending to normally move and hold said member to a raised position, releasable means acting to hold said member in a lowered position against the action of said spring means including an actuating element in the path of a coin inserted into said coin slot, whereby a coin inserted in said coin slot will actuate said actuating element to release said releasable means to permit said spring means to move said member to a raised position, and means operable upon the manual lowering of said member for resetting said releasable means.

2. A toy bank comprising in combination, a hollow body having a coin slot therein, a member pivoted to said body exteriorly thereof for up and down swinging movement, spring means tending to normally move said member in a raised position, releasable means acting to hold said member in a lowered position against the action of

said spring means including an actuating element in the path of a coin inserted into said coin slot, whereby a coin inserted in said coin slot will actuate said actuating element to release said releasable means to permit said spring means to move and hold said member to a raised position, and means operable upon the manual lowering of said member for resetting said releasable means, a register mechanism within said body and readable through a sight opening provided therein, and register actuating means operatively connected to said member for actuation upon the manual lowering of said member from a raised position.

3. A toy register bank comprising in combination a hollow body including a pivoted member, said hollow body having a coin slot therein, means operable upon insertion of a coin into said coin slot for moving and holding said pivoted member in a raised position, means operable upon the manual return movement of said pivoted member for resetting said first mentioned means, a register device mounted within said hollow body including a numeral wheel visible through a sight opening provided in said toy figure, and means operatively connected to said member for actuating said register device, upon each manual return movement of said pivoted member.

4. A toy bank comprising in combination, a hollow body having a coin slot adjacent the top thereof, a shaft journaled in said body and extending beyond one side thereof, a member fixed to the outer end of said shaft, an actuating lever pivoted within said hollow body and having one of its ends disposed adjacent said coin slot to be disposed in the path of a coin inserted therein, means operable upon actuation of said lever for turning said shaft to raise said member and hold the same in a raised position, and means operable upon manual movement of said member in an opposite direction for restoring said lever to its original normal position for subsequent operation.

5. A toy bank comprising in combination, a hollow body having a coin slot adjacent the top thereof, a shaft journaled in said body and extending beyond one side thereof, a member fixed to the outer end of said shaft, an actuating lever pivoted within said hollow body and having one of its ends disposed adjacent said coin slot to be disposed in the path of a coin inserted therein, means operable upon actuation of said lever for

turning said shaft to raise said member and hold the same in a raised position, said means including a disk freely mounted on said shaft, a pin extending from one side of said disk, an arm extending radially from said shaft and disposed in the path of said pin, a spring acting upon said disk to hold the pin in engagement with said arm, a tooth on the periphery of said disk, and a pawl carried by said lever and normally engaging said tooth, and means operable upon manual movement of said member in an opposite direction for restoring said lever to its original normal position for subsequent operation.

6. A toy register bank comprising in combination, a hollow body having a coin slot therein, a member pivoted to the body means operable upon insertion of a coin in said coin slot for raising said pivoted member and holding the same in a raised position, and means operable upon manual actuation of said member in an opposite direction for resetting said first means, a sight opening provided in said hollow body, a rotatable numeral wheel mounted rearward of said opening, and means operatively connected to said member for actuating said register by imparting predetermined turning movement to said rotatable numeral wheel upon each manual actuation of said member.

7. In a toy register bank, a hollow coin receiving body having a sight opening therein, a registering device mounted within said body including a shaft, a numeral drum fixedly mounted on said shaft, a ratchet wheel fixed to said shaft, a spring pressed pawl engaging said ratchet wheel, a turnable member journaled within said body to which said pawl is pivotally connected, spring means acting upon said turnable member to retract and hold said pawl in a retracted position, coin actuated releasable catch means acting upon said turnable member to restrain the movement of the same by the action of said spring means, and manually operable means for imparting a turning movement to said turnable member after the release of said catch means to cause said pawl to move from a retracted position to extended position to cause said ratchet wheel to rotate said shaft and numeral drum a predetermined distance.

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