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T. W. MILLS & J. E. CUNNINGHAM.

SAVINGS BANK.

APPLICATION FILED JUNE 6, 1902.

NO MODEL.

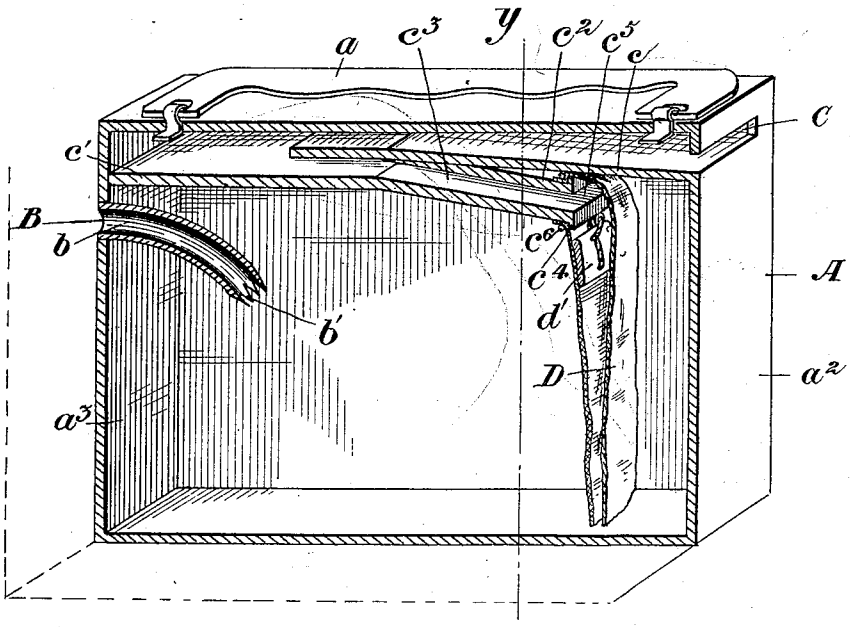



Fig. 1.

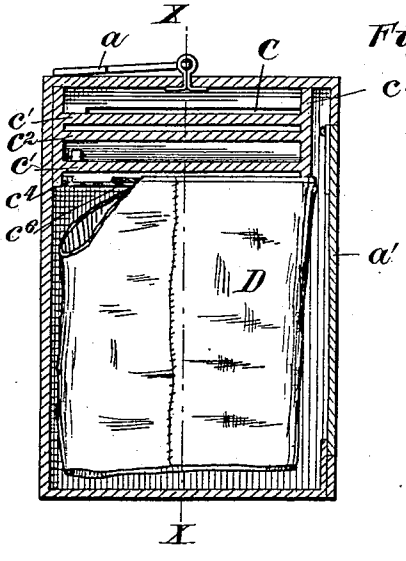



Fig. 2.

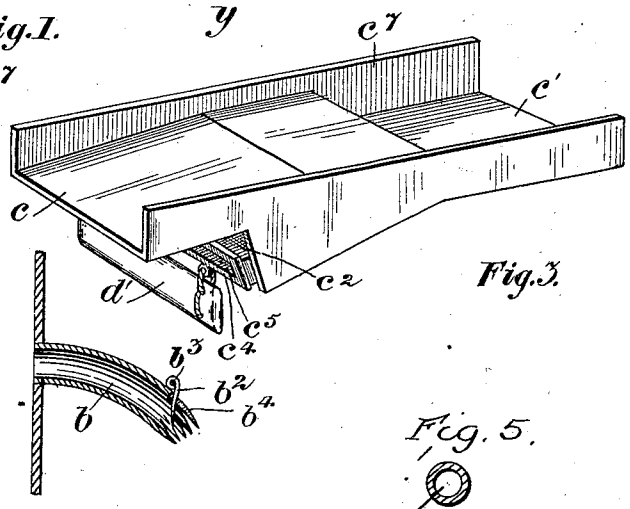
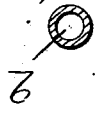



Fig. 4.

Fig. 3.

Fig. 5.




Witnesses

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# UNITED STATES PATENT OFFICE.

THOMAS WILLIAM MILLS AND JOHN ERNEST CUNNINGHAM, OF KINGSTON, CANADA.

## SAVINGS-BANK.

SPECIFICATION forming part of Letters Patent No. 725,858, dated April 21, 1903.

Application filed June 5, 1902. Serial No. 110,356. (No model.)

*To all whom it may concern:*

Be it known that we, THOMAS WILLIAM MILLS and JOHN ERNEST CUNNINGHAM, bankers, of the city of Kingston, in the county of Frontenac, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Savings-Banks, of which the following is a specification.

Our invention relates to improvements in savings-banks which are specially intended for home use and are issued by bankers or banks to their customers to assist them in saving their money; and the object in inventing this bank is to make a savings-bank which shall be extremely cheap and simple in construction and from which it will be absolutely impossible to extract either coins or paper money which may have been inserted therein without having access to the bank by means of a key or other lock; and it consists, essentially, of a box having a suitable door provided in one of its sides and a slot sufficiently large to admit the largest coin and an opening for inserting bills, means being provided for preventing the withdrawal of the coins or the bills after having been inserted in the bank, the various parts being constructed and arranged in detail, as hereinafter more particularly described.

Figure 1 is a perspective view of one-half of our savings-bank, being cut through the middle on the line X X, Fig. 2. Fig. 2 is a transverse section of our savings-bank on the line Y Y, Fig. 1. Fig. 3 is a detail perspective view of the means for preventing the removal of coins from the bank. Fig. 4 is a detail of the tube for preventing the removal of bills with the auxiliary pivotal tooth. Fig. 5 is a cross-sectional view of the tube through which bills are introduced.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the box or casing for the bank, and this casing may be of a variety of forms, whether square, oblong, cylindrical, or any other suitable shape, the form shown, however, being the one which we consider preferable. A handle $a$ may be provided on the top of the box.

$a'$ is a door which is secured by hinges in one of the sides or one of the ends or the bottom of the box and may be locked by any suitable means.

For the sake of clearness throughout the specification and claims the end $a^2$ of the box will be referred to as the "forward" end and the end $a^3$ will be called the "rear" end.

An opening B is formed in the box, preferably at the rear end, and this opening may be of any suitable form, though it is preferably circular. A tube $b$ extends inwardly from the hole or orifice B and is provided at its inner end with inwardly-pointing teeth $b'$. In Fig. 4 an auxiliary tooth $b^2$ is shown on the tube $b$, the said tooth being suitably pivoted at $b^3$ to the upper side of the tube $b$ and depends through a slot $b^4$ into the tube. The tube $b$ is preferably curved, as shown, in order to make it more difficult and practically impossible to insert any instrument therethrough to remove the paper money from the bank. It will thus be seen that a bill may be folded tightly and passed through the tube $b$ into the bank; but once it is past or any portion of it is past the teeth $b'$ it cannot be withdrawn from the bank without tearing or mutilating the bill to such an extent as to render it worthless.

C is a slot formed in the upper portion of a side or end of the box. A shelf or platform $c$ extends inwardly from the slot C, the inner end of the said shelf being preferably at a distance from the rear end of the box just equal to or slightly greater than the diameter of the largest coin for which the bank will be used.

$c'$ is a second shelf or platform, which is slightly lower than the shelf $c$, the distance between these shelves at their nearest point being just sufficient to permit the thickest coin passing freely between them. The shelf $c'$ extends from the back of the bank, or, in other words, from the end of the bank opposite to the slot C toward the forward end of the bank and is preferably sloped downwardly. Between the shelf $c'$ and the shelf $c$ a plate $c^2$ is provided, thus forming with the shelf $c'$ an inner passage or chute $c^3$, through which the coins will pass. This chute terminates, preferably, at a distance from the front end of the box slightly greater than half the diameter of the largest coin which

will be used in the bank. A lip $c^4$ is formed completely around the outlet of the chute $c^3$.

D is a tube or bottomless bag which may be made of any suitable flexible material, but is preferably made of very light silk. This flexible tube is secured over the outlet $c^5$ by suitable means, such as a cord $c^6$, passing around the outside of the chute $c^3$ behind the lip $c^4$. It will thus be seen that a coin may be inserted in the slot C, and by tilting the forward end of the bank first upwardly and then downwardly the coin will slide in along the platform $c$ and drop onto the shelf $c'$ and will then slide back through the chute $c^3$ and the tube D, thus dropping to the floor or bottom of the bank. The tube or bottomless bag D makes it absolutely impossible to shake a coin back into the chute $c^3$, for if the bank be reversed bottom side up the coin will simply drop on the bag and force it into the corner between the opening $c^5$ and the front of the bank, thus completely closing the opening $c^5$. In order to make the closure of the opening doubly secure, a swinging weight $d'$ may be suspended near the flexible tube D, either inside or outside, by suitable means, so that if the bank be reversed the said weight will fall either in front of the hole or behind it, carrying the flexible tube with it, and thus completely covering the hole.

It may be mentioned that the object in view in constructing the passage or chute as above is chiefly to prevent the insertion of a hooked or V-shaped instrument for the purpose of holding open the flexible tube while the coins are being removed from the bank. It will be noticed that the distance between the the edge of the shelf $c$ and the rear end of the bank is considerably less than the distance from the edge of the said shelf to the opening $c^5$. It will thus be seen that if a V-shaped instrument having a short and a long end were inserted through the slot C the small end could not be greater than the distance from the end of the shelf $c$ to the rear of the box; but this length would obviously be too short to reach the end of the shelf $c$ to the opening $c^5$, and consequently the flexible tube could not be held open by such an instrument to enable coins to be removed.

It will now be seen that we have invented a bank from which it will be impossible to remove either coins or paper money; but although in the drawings we have shown the form of the apparatus which we consider preferable it is to be understood that a considerable number of changes may be made in the details of the device without departing from the spirit of our invention. For example, the inwardly-extending tube B might be placed in any suitable part of the bank and not in the exact position shown in the drawings. Also this tube might be made angular instead of curved. The position of the device for preventing the removal of coins might also be varied.

Another variation which might be made in the construction would be to have the door formed in the bottom of the bank instead of the side, as shown, and in this case the side piece $c^7$ would be close up to the side of the box.

Although the device at the front of the bank is intended chiefly to prevent the removal of coins therefrom, it will be understood that this device may be used to prevent the removal of bills or other money or car-fares from a fare-box, and the curved tube at the rear end of the box could be used for preventing the removal of any articles—such as car-tickets, ballots, or the like—from receptacles.

Although we have described our invention as relating particularly to savings-banks, it is to be understood that the same device may be applied to other receptacles—such as mail-bags, ballot-boxes, fare-boxes, and the like—without exceeding the scope of our invention.

What we claim as our invention is—

1. In a device of the class described, the combination with the receptacle having an orifice in one of the walls thereof, of a rigid tube of circular cross-section extending inwardly from the orifice, and a circular row of integral teeth on the inner end of said tube, substantially as described.

2. In a device of the class described the combination with the receptacle having an orifice formed in one of its walls, of a rigid tube of circular cross-section extending inwardly from said orifice and having a circular row of inwardly-pointing teeth formed integral therewith at its inner extremity, and having a slot formed in its upper side, a pointed tooth pivotally secured to the upper side of said tube and designed to depend through said slot into said tube as and for the purpose specified.

3. In a device of the class described the combination with the receptacle having a slot and a flexible tube therein for preventing the removal of coins or other articles contained in the receptacle through the slot, of means interposed between the slot and the flexible tube for preventing the insertion of an instrument into the flexible tube as and for the purpose specified.

4. In a device of the class described, the combination with a receptacle having a slot formed on one of its walls, of a chute extending from said slot to the opposite end of the receptacle and a return-chute extending from the rear end of the receptacle to a point in proximity to the forward end thereof, said return-chute being substantially parallel with the first-mentioned chute and a tube of flexible material secured over the inner mouth of said return-chute as and for the purpose specified.

5. In a device of the class described, the combination with a receptacle having a slot formed in one of its walls in proximity to the top of the receptacle, of a shelf extending

from the lower edge of said slot toward the opposite end of the receptacle, said shelf being approximately parallel to the top of the receptacle, and a lower shelf located below said upper shelf and being approximately parallel thereto, said lower shelf extending from the rear end of the receptacle toward the forward end thereof, thus forming a return-chute beneath the upper shelf, the distance between the rear end of the receptacle and the rear edge of the upper shelf being less than the distance between the rear edge of the upper shelf and the forward end of the lower shelf, and a flexible tube secured over the opening at the end of said chute as and for the purpose specified.

6. A savings-bank comprising a box having a coin-opening at one end and a paper-money opening or orifice at its opposite end, a rigid tube extending into the box from said paper-money orifice and having teeth at its inner extremity, and a passage extending rearwardly from the coin-slot to the opposite end of the box and then forwardly, and a flexible tube secured over the opening at the end of said passage as and for the purpose specified.

Signed at the city of Kingston this 30th day of May, 1902.

THOMAS WILLIAM MILLS.
JOHN ERNEST CUNNINGHAM.

Witnesses:
THOMAS MIKLE MCCORMICK,
ETHEL KATHARINE MAUND.