

No. 732,770.

PATENTED JULY 7, 1903.

A. C. MILLS, JR.
SAVINGS BANK.

APPLICATION FILED JAN. 22, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

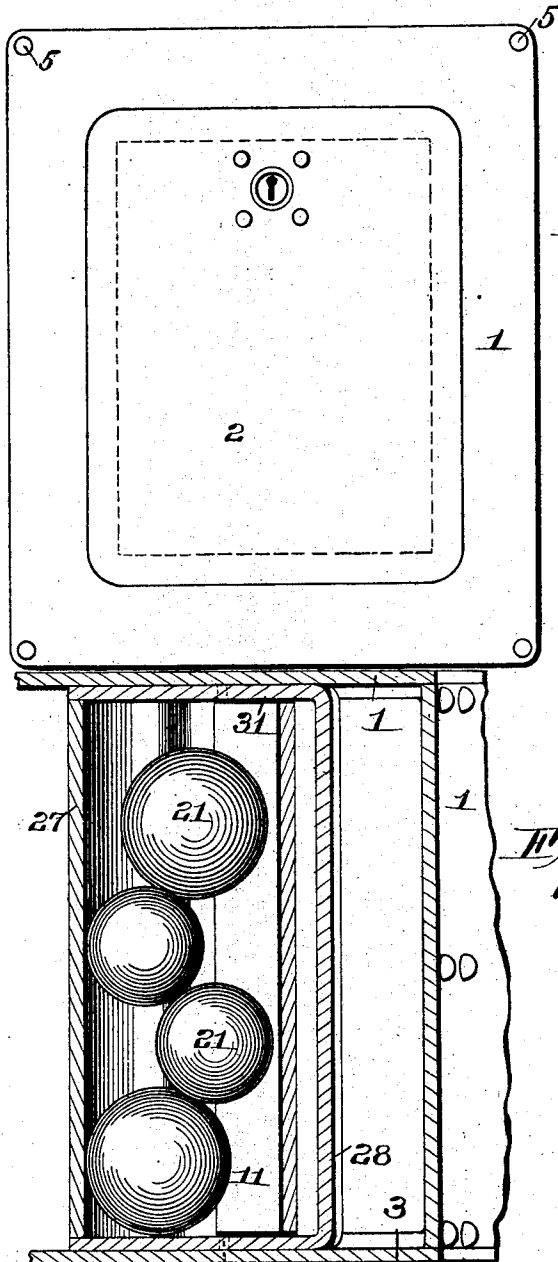


Fig. 1.

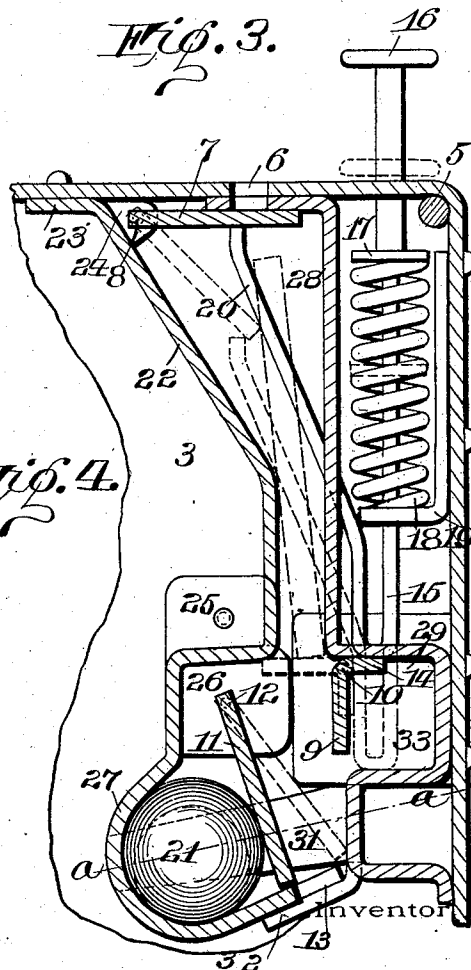


Fig. 3.

Fig. 4.

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Thatcher B. Payne
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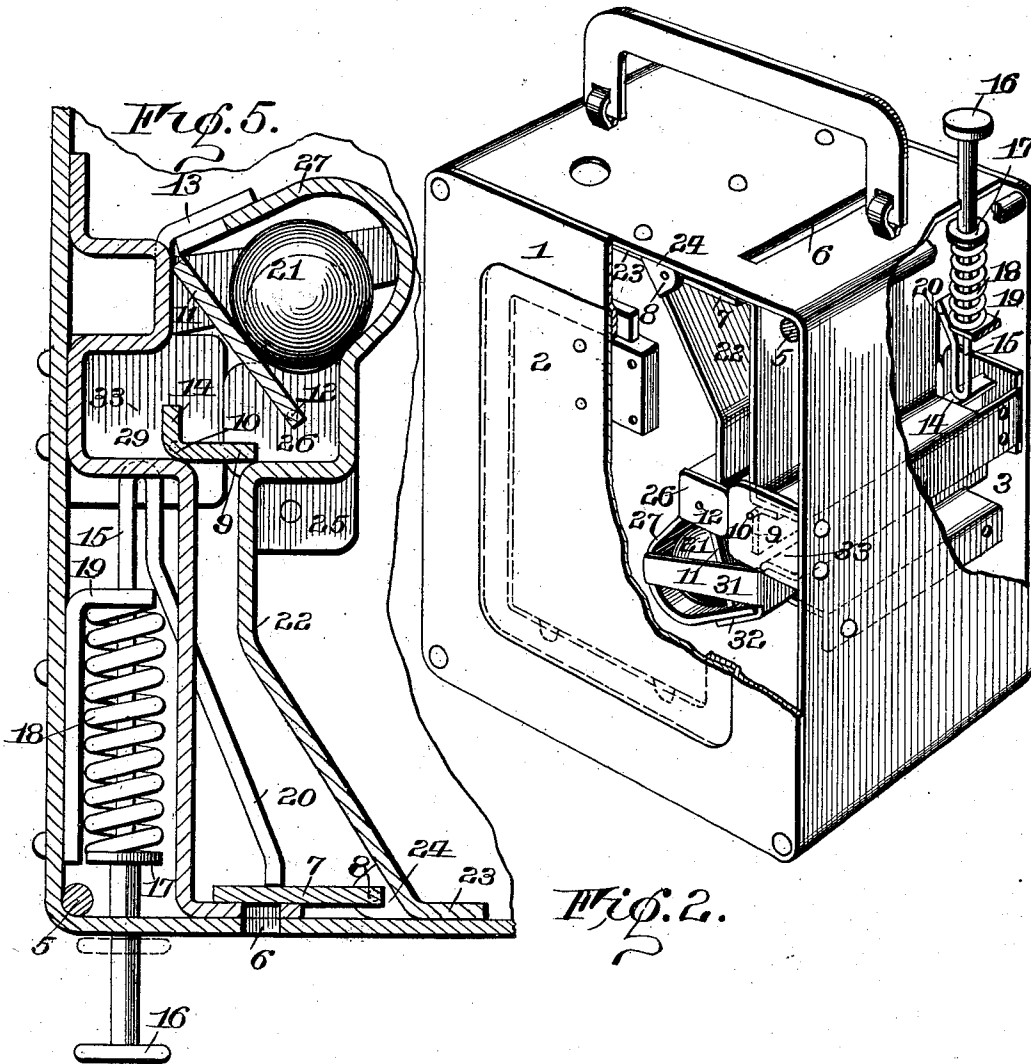
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2 SHEETS—SHEET 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

AMERICUS C. MILLS, JR., OF ROCHESTER, NEW YORK.

SAVINGS-BANK.

SPECIFICATION forming part of Letters Patent No. 732,770, dated July 7, 1903.

Application filed January 22, 1902. Serial No. 90,788. (No model.)

To all whom it may concern:

Be it known that I, AMERICUS C. MILLS, JR., of Rochester, county of Monroe, and State of New York, have invented certain new and useful Improvements in Savings-Banks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My present invention relates to small portable banks or depositories of the kind now generally distributed to customers by savings banks or similar institutions and which are to remain in the possession of the user and at certain intervals taken to the savings bank or other depository to be emptied, although the invention is applicable generally to small savings-banks.

My invention has for its object to provide a device which will prevent the removal of articles deposited therein except by the authorized person holding the key; and it further consists in the certain improvements hereinafter described, the novel features being pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a front elevation of a portable bank embodying my improvements. Fig. 2 is a perspective view, partly in section. Fig. 3 is a vertical sectional view of the coin-passage and the doors or barriers therein. Fig. 4 is a horizontal sectional view on the line *aa* of Fig. 3, showing the position assumed by the parts when the bank is on its side; Fig. 5, a view similar to Fig. 3, showing the position occupied by the parts when the bank is inverted.

Similar reference-numerals in the several figures indicate similar parts.

The casing or receptacle to which my invention is applied may be of any suitable shape or construction; but in the present embodiment I prefer to construct it of sheet metal, such as steel, and embodying the front plate 1, having an aperture for a hinged door 2, and a similar rear plate 3. The bottom, sides, and top are preferably formed of a single piece of sheet metal with its ends abutting or lapped, if desired, and secured by any suitable means. The front and back plates are held together against the edge of the

plate forming the top, bottom, and sides by bolts or stay-rods 5, arranged at the corners and having their ends extending through the plates and riveted thereto, as shown.

6 indicates an aperture formed, preferably, in the top of the bank and of such size as to permit the introduction of a coin or folded bill, as desired, this aperture leading into a coin channel or passage opening at its inner end within the casing, and between the aperture and the inner end of the passage the channel is provided with barriers or doors, hereinafter described, which effectually prevent the removal of the contents of the receptacle. In the present arrangement I employ three of these doors or barriers, the upper one (indicated by 7) being pivoted at its ends to the casing at 8 to swing vertically and serving to close the aperture 6. Arranged at a suitable distance below this door or flap sufficiently far for the accommodation of the largest coin or bill to be introduced is a second door or flap 9, pivoted at 10 to swing in a vertical plane, and below this, again, is a door or flap 11, pivoted at 12 and adapted to close the exit end 13 of the coin-passage. The flap or door 9 is provided, preferably near one end, with a projection 14, extending in rear of the pivot and with which cooperates the lower end of a plunger or longitudinally-movable rod 15, having its upper end projecting through the casing and provided with an operating handle or knob 16, said rod also being provided with a collar 17, engaging the upper end of a spring 18, the lower end of which is supported upon an arm or bracket 19, the tendency of the spring being to move the plunger vertically, so that its lower end will be above the shoulder 14 on the door 9 and will permit the latter to normally assume the position shown in Fig. 3, where it will not obstruct the coin-passage. The plunger 15 is further provided with an arm 20, adapted to contact with the lower side of the barrier or door 7 when moved vertically and to hold or retain the latter normally closed. The flap or door 11 is arranged below the door 9 and is when the bank is in normal position permitted to open by gravity, as shown in Fig. 3, and arranged in rear of this door is a gravitating closing device

operated to close the aperture 13 when the bank is in other than the horizontal or normal position. In the present instance this closing device consists of a plurality of balls or marbles 21, some being of larger diameter than others, located in a chamber the bottom of which is inclined to hold the balls out of contact with the door or flap when the bank is in the position shown in Fig. 3, allowing said door to open by gravity. When, however, the bank is turned on its side, as shown in Fig. 4, these balls rolling upon each other will move against the door 11, effectually closing it, and the same operation will take place when the bank is turned on end, as shown in Fig. 5, the balls then moving down the upper inclined surface, as shown. The arrangement of parts thus shown serves effectually to prevent the removal of the contents of the bank by changing the position of the latter, and, further, by connecting the doors 7 and 9 by a movable member or plunger, so that when one is opened the other is closed, the introduction of a wire or other instrument is prevented, and it is impossible to hold open the interior weight-operated door or flap to permit the removal of coins by this means in connection with the change of position of the receptacle.

It is desirable to have the door or barrier 9 free from the plunger when the latter is in outer position in order that said door may assume the position shown in Fig. 5 when the bank is inverted, as this prevents the coins from entering the coin-channel whether or not the door 7 is open. The extension of the plunger 15, coöperating with the extension 14 on the door 9, not only serves to close the door when the outer door 7 is opened, but is of sufficient length to hold it closed during the whole of the plunger's movement and only releases the door when the outer door is closed.

For convenience of construction and simplicity of the parts I prefer to form the coin-channel and casing containing the operating mechanism of two pieces of sheet metal, one embodying the plate 22, having the flange 23 at its upper end for attachment to the top of the casing, the lugs 24, in which the door 8 is pivoted, the side lug or ear 25, secured to the rear of the casing, the lugs or ears 26 for the pivot of the door 11, and the rounded channel portion 27 for the accommodation of the balls, as shown. The other plate (indicated by 28) forms one side of the coin-passage and is provided at its upper end with an aperture corresponding to the aperture 6 in the casing, while its lower portion is bent rearwardly to form the chamber 29 for the accommodation of the flap or door 9 and is then extended forwardly again in line with the flap 9 when in the open position and is provided with the ears 31, extending across the ends of the chamber containing the balls, and at the sides with the lugs or ears 22, extending beneath

the chamber, while the lower central portion is bent back to the outer wall of the casing to secure the plate and form the exit-aperture 13 of the coin-channel. At the ends of the chamber 29 the lugs or ears 33 are provided to afford bearings for the pivots of the door 9.

While I have termed the channel or passage for the introduction of money the "coin-channel," it will be understood that folded bills may be passed through it when the device is used as a bank, and it will also be understood that substantially the same mechanism could be employed for other purposes than banks, if desired—such, for instance, as letter-boxes or other receptacles from which it is desired to prevent the removal of the contents.

It is eminently desirable that the means which controls the doors 7 and 9 should be detachably connected with both of them, serving to cause the operation of one and permit the operation of the other by the weight or similar opposing force, as this prevents both doors being held open simultaneously—as, for instance, when the bank is inverted, as shown in Fig. 5—as otherwise an instrument might be inserted to push back the inner door or flap 11 and permit the removal of the contents.

I claim as my invention—

1. The combination with the receptacle having an aperture opening into a channel, and a flap adapted to close the aperture, of a second pivoted flap adapted to close the channel, a retaining mechanism engaging the first flap to normally hold it in the closed position over the aperture, and an extension on the second flap at one side of its pivot engaged by said mechanism whereby the second flap is operated to close the channel when the first flap is operated to open the aperture.

2. The combination with a receptacle having an aperture, a door or flap coöperating with said aperture, and a second door or flap arranged in the channel, of a retaining mechanism operable independently of and adapted to engage the first-mentioned flap to normally hold it in closed position, and connections between said mechanism and the second flap operating the latter to close the channel when the first flap is removed from the aperture.

3. The combination with the receptacle having an aperture and provided with a channel leading therefrom, a flap or door extending over the aperture, and a second pivoted flap separated from the first and normally movable independently thereof having an extension at one side of its pivot, of a spring-operated plunger coöperating with the extension on the latter flap and normally engaging the first flap to hold it in the closed position.

4. The combination with the receptacle having a coin-channel and an aperture lead-

ing thereto, a flap or door covering said aperture, and a second pivoted flap arranged in said channel provided with a projection at one side of its pivot, of an operating-plunger accessible from the exterior of the receptacle and engaging said extension to operate and lock the flap in closed position in the channel when the plunger is actuated, and an arm on said plunger controlling the operation of the first flap, and a spring normally holding the plunger in retracted position and disengaged from the second flap.

5. The combination with the receptacle having a coin-channel, of a pivoted flap arranged at one side of the channel, a pocket located in rear of the flap, and a gravity-controlled operating mechanism normally out of operative position but which engages the flap to move it across the channel when the receptacle is moved out of its normal position.

6. The combination with the receptacle having a vertically-extending channel, of a pivoted flap, a pocket having the bottom extending downwardly and rearwardly from the flap, and gravity-operating weights located in the pocket and engaging the rear of the flap to move it across the channel when the parts are moved out of their normal position.

7. In a depository, the combination with a receptacle having a vertically-extending channel, of a pivoted flap, a pocket having the top and bottom extending rearwardly and downwardly from the flap, and balls located in the pocket, and movable outwardly therefrom to close the flap across the channel when the receptacle is moved out of its normal position.

8. In a depository, the combination with a receptacle having a vertically-extending channel and provided with an aperture opening into the latter, a flap or door covering said aperture, and a second flap pivoted at one side of the channel, of connections between the two flaps whereby the latter is closed when the former is opened, a gravity-operating pivoted flap arranged at the inner end of the channel, a pocket arranged at one side thereof, and weights supported in the pocket and adapted to bear against the rear side of the flap to operate it across the channel when the receptacle is moved out of its normal position.

9. In a depository, the combination with a receptacle having a vertically-extending channel and provided with an aperture opening into the latter, a pivoted flap extending over the aperture, and a second flap pivoted at one side of the channel and normally removed from the channel, of a plunger engaging the first-mentioned flap to normally support it in the closed position and engaging the second flap to operate it to close the channel when the aperture is opened, and a separate flap pivoted at one side of the channel and normally in the open position, a pocket

having the top and bottom extending rearwardly and downwardly from said flap, and weights in the pocket moving outwardly therefrom, when the receptacle is moved out of its normal position, to engage the flap and move it across the channel.

10. A casing or receptacle for banks embodying the sides, and top and bottom portions constructed of a single strip of material, and the front and rear walls secured thereto by stay-rods passing through said front and rear portions and having the ends engaging therewith.

11. A casing or receptacle for banks embodying the sides, and top, and bottom portions composed of a single strip of material, the rear wall, and a front wall having an aperture, said walls being secured by stay-rods passing through the receptacle and secured at their ends to the walls, and a door closing the aperture in the front wall having at one side lugs engaging the rear of the wall and at the opposite side provided with a lock having the bolt engaging in rear of the wall at the opposite side of the aperture.

12. The combination with the receptacle having an aperture therein, and a plate extending at one side of the aperture and forming a pocket and provided with lugs, a flap journaled between the latter, and weights loosely supported in the pocket in rear of the flap, of a second plate extending at the opposite side of the aperture and cooperating with the former plate to form a coin-channel and provided with ears, a flap pivoted between the ears and normally in the open position, a pivoted flap normally closing the aperture in the casing, and connections between the latter and the normally open flap whereby the latter is closed when the former is opened.

13. The combination with a receptacle having an aperture therein, a plate extending at one side of the aperture having ears in proximity thereto and at its lower end forming an open-sided pocket and provided with lugs, and a door pivoted to said lugs and extending over the pocket, of a second plate extending at the opposite side of the aperture and forming with the first plate a channel and provided with ears thereon, and a gravity-operating flap arranged between the aperture and the door and pivoted to said ears and a barrier for the aperture in the receptacle pivoted to the ears on the first-mentioned plate, connections between the barrier and the gravity-operating flap to control their alternate opening and closing, and weights in the pocket movable outwardly therefrom, when the receptacle is moved out of the normal position, to engage the door at the front of the pocket to move it across the channel.

14. The combination with a receptacle having a passage leading into it, of a flap for closing said passage, a channel extending longitudinally of the flap, and a plurality of weights arranged in the channel movable toward and

from and longitudinally of the flap when the receptacle is in other than its normal position.

15. The combination with a receptacle having a passage leading into it, of a pivoted flap
5 or door adapted to close said passage, a chamber in the receptacle in rear of the door having its upper and lower sides inclined downwardly from the flap, and a plurality of balls

of different diameters arranged in the chamber and adapted to close the door when the
receptacle is in other than a normal position. 10

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Witnesses:

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