Oct. 21, 1947. F. L. STEPHENS 2,429,494

SAVINGS BANK

Filed July 20, 1945

FIG. 1.

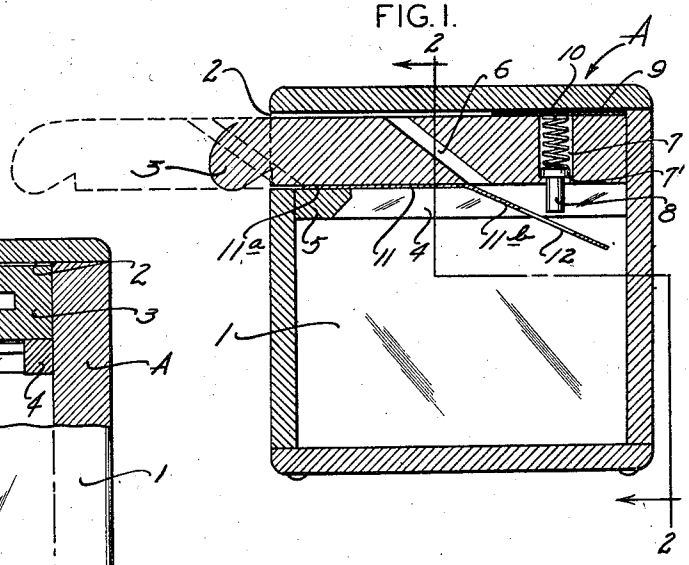


FIG. 2.

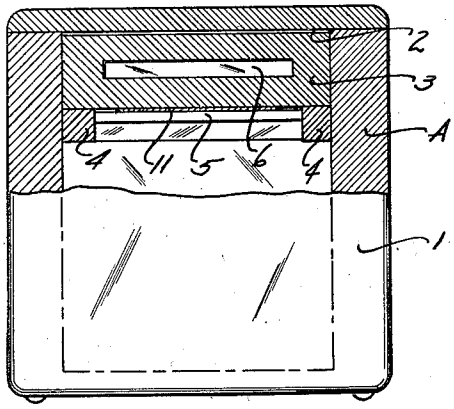


FIG. 7.

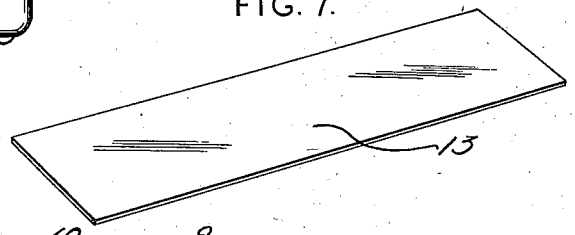


FIG. 4.

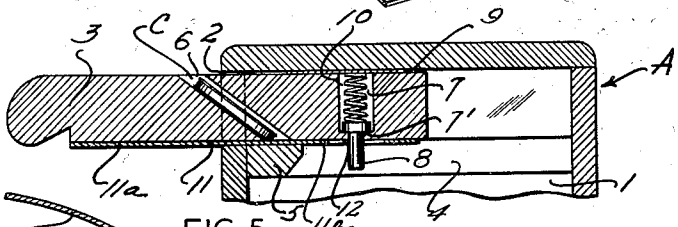


FIG. 5.

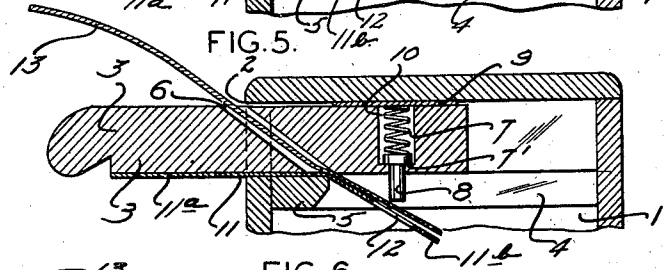


FIG 3

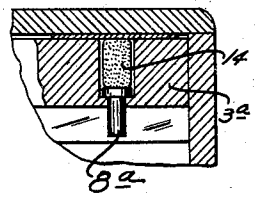
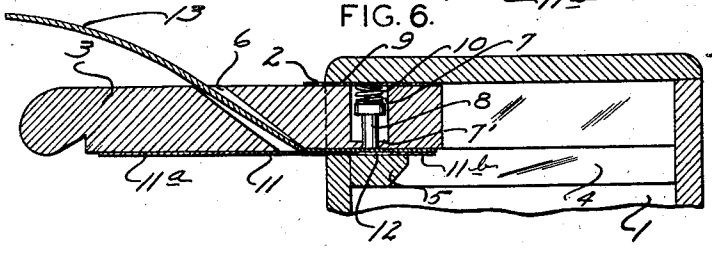


FIG. 6.



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SAVINGS BANK

Frederick L. Stephens, Indianapolis, Ind.

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2 Claims. (Cl. 232—4)

1

This invention relates generally to savings banks of the type adapted for the reception of coins, and more specifically to a savings bank of this type which may be opened for removal therefrom of the coins contained therein by a possessor of the secret relating to the manner of opening the savings bank, the predominant object of the invention being to provide a savings bank of the type referred to above which is an improvement of the savings bank disclosed by United States Letters Patent No. 2,120,514, granted to me on June 14, 1938, in that the savings bank of the present invention may be opened in an improved manner which, although simplified when compared with the manner of opening the savings bank disclosed by the Letters Patent referred to above, retains all of the mystery incident to the operation of opening the bank of said earlier Letters Patent.

Fig. 1 is a vertical section taken through the savings bank of the present invention.

Fig. 2 is a view partly in rear elevation and partly in vertical section taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmentary vertical section showing a modified form of a portion of the improved savings bank.

Fig. 4 is a fragmentary vertical section of the improved savings bank illustrating the manner in which a coin is deposited in the savings bank.

Fig. 5 is a fragmentary vertical section which illustrates an early step in the operation of opening the improved savings bank of the present invention.

Fig. 6 is a view similar to Fig. 5 but illustrating a more advanced step in the operation of opening the improved savings bank of the present invention.

Fig. 7 illustrates an element employed in performing the operation of opening the savings bank of the present invention.

In the drawings, wherein are shown for purposes of illustration, merely, two embodiments of the invention, A designates the improved savings bank generally. The savings bank A, as illustrated in the drawings, includes a housing 1 which is formed by front, back, side, top, and bottom wall portions, rigidly secured together in a suitable manner to provide a hollow structure. In the front wall of the housing a drawer opening 2 is provided through which a drawer 3 is adapted to slide, the opposed side walls of the housing 1 having secured thereto, at the inner faces thereof, drawer-supporting elements 4 which extend from front to back of the interior of the

2

housing and support the drawer 3 for sliding movement. Secured to the inner face of the front wall of the housing 1 is an element 5 which extends transversely of said front wall between the forward portions of the drawer-supporting elements 4. It is important to note that the drawer opening 2 provides the only means of access to the interior of the housing 1, said housing being otherwise completely closed by the rigidly positioned and non-removal wall portions which produce said housing.

The drawer may be formed from any suitable material, wood, for instance, and it is of such length that when said drawer is in its innermost position a forward portion thereof, which is shaped to facilitate gripping thereof, extends outwardly beyond the housing 1 (see Fig. 1). The drawer has formed therethrough an inclined coin slot 6 which is open at the top and bottom faces of said drawer, the drawer of the particular savings bank illustrated in the drawings being provided with a coin slot of a size to receive twenty-five cent pieces, or United States coins of smaller denominations.

The drawer is provided, at a point adjacent to its rear end, with a vertically disposed opening 7, the lower portion of said opening being of reduced diameter and an annular shoulder 7' being provided at the point where the larger upper opening portion and the smaller lower opening portion meet. Arranged in association with the opening 7 is a headed pin 8, the shank of said pin being extended through the smaller, lower portion of the opening 7 and downwardly beyond the lower face of the drawer 3, while the head of said pin is disposed within the larger, upper portion of the opening 7 in contact with the shoulder 7'. The opening 7 is closed at its upper end by a strip of material 9, paper, for instance, which is glued, or otherwise secured, to the top face of the drawer 3, and interposed between said strip of material and the head of the pin 8 is a light coil spring 10 which is maintained under compression so that it tends to urge the pin 8 in a downward direction.

Associated with the drawer 3, at the lower face thereof, is a strip of flexible material 11, relatively heavy paper, for instance. The forward portion 11a of said strip of material 11 is glued, or otherwise secured, to a portion of the bottom face of the drawer 3 which is located forwardly of the lower end of the coin slot 6, and the remainder of said strip of material, which is located rearwardly of said forward strip portion that is secured to the drawer, being free from

attachment to the drawer and being in the form of a flap 11*b*. The portion 11*b* of the strip of material 11 has formed therethrough an opening 12 through which the shank of the pin 8 extends when the free portion 11*b* of said strip of material assumes a position in contact with the lower face of the drawer 3, as will present appear herein.

When, in the use of the improved savings bank disclosed herein, it is desired to deposit a coin within the housing 1 of the bank, the drawer 3 is drawn outwardly to the approximate position in which said drawer is shown by dotted lines in Fig. 1. The coin, a quarter, dime, nickel, or penny, is then introduced into the coin slot, as is shown in Fig. 4 wherein the coin is designated by the reference character C. When the drawer 3 is drawn outwardly, contact of the rear flap portion 11*b* of the strip of material 11 with the transverse element 5 will cause said flap portion to be cammed upwardly into contact with the lower face of the drawer, as is shown in Fig. 4. In such position of the flap portion 11*b* of the strip of material 11 the lower end of the coin slot will be closed by said flap portion, and the shank of the pin 8 will extend through the opening 12 of said flap portion 11*b* of said strip of material 11. The drawer 3 is then moved inwardly and as the lower end of the coin slot moves inwardly beyond the inner end of the transverse element 5, the weight of the coin will move the flap portion 11*b* of the strip of material 11 downwardly away from the bottom face of the drawer 3 so as to uncover the lower end of the coin slot 6 and permit the coin to drop into the interior of the housing 1.

When a coin has been deposited in the housing 1 of the savings bank in the manner described above, it may be removed from said housing only by a person who possesses the secret of the manner of opening the bank. This follows from the fact that the drawer opening 2 is the only opening into the interior of the housing of the bank through which the coin may be withdrawn from said housing, and the drawer is locked against withdrawal of said drawer from the drawer opening 2 by the pin 8. In other words, if an attempt is made to withdraw the drawer from the drawer opening by merely pulling the drawer outwardly, the pin 8 will contact with the inner face of the transverse element 5, when the drawer reaches its normal limit of outward movement, so as to prevent complete withdrawal of the drawer from the drawer opening 2. Also, when the drawer is drawn outwardly to expose the upper end of the coin slot 6, the lower end of said coin slot is closed by the flap portion 11*b* of the strip of material 11 and by the transverse element 5, as is shown in Fig. 4, and therefore it is not possible for a coin to pass through the coin slot from the interior of the housing if the savings banks be turned bottom side up and be shaken in an attempt to withdraw a coin in this manner.

The means for opening the savings bank in accordance with the secret relating to such bank opening operation, comprises a strip 13 of material, made, for instance, of heavy paper, which is shown in Fig. 7. The drawer 3 is drawn outwardly sufficiently to expose the upper end of the coin slot 6 and the strip of material 13 is passed downwardly through said coin slot to cause the inner end portion of said strip to extend into the interior of the housing 1 in a position where it overlies the flap portion 11*b* of the strip of material 11 (see Fig. 5). With the strip of material 13 so arranged the drawer is pulled outwardly until it becomes tight because of a binding action set up by the presence of said strip of material 13 between the rear edge of the bottom of the coin slot and the top rear edge of the transverse element 5. The strip of material 13 is then drawn upwardly and outwardly for a distance of approximately one-quarter of an inch, while the drawer 3 in being moved outwardly and because of the binding action to which said strip of material 13 is subjected at the point referred to above, such movement of the strip of material 13 and the drawer 3 will cause the rear portion of said strip of material to be elevated toward the bottom face of the drawer 3. The upward movement of the rear portion of the strip of material 13 described above will cause said rear portion of the strip of material to engage and move the pin 8 upwardly, against the light force exerted by the coil spring 10, sufficiently to permit said pin to clear the transverse element 5, whereupon the drawer and the strip of material 13 may be moved outwardly together until the drawer has been completely withdrawn from the drawer opening 2 of the housing 1.

With the drawer 3 removed from the drawer opening of the housing 1, said housing may be turned bottom side up and the coins within said housing may be discharged therefrom through the drawer opening 2. When it is desired to replace the drawer 3 after removal of the coins from the housing, as described above, the rear end portion of said drawer and the rear end portion of the strip of material 13 are introduced into the drawer opening 2 with the pin 8 held in an elevated position until said pin passes into the drawer opening and into engagement with the bottom face of said drawer opening. The inward movement of the drawer is then continued, and when the pin passes inwardly beyond the rear edge of the transverse element 5 the coil spring 10 will move said pin downwardly to its lowered position where it again serves to lock the drawer against removal from the housing.

In Fig. 3 a modified form of the invention is illustrated where the pin 8*a* is urged downwardly with respect to the drawer 3*a* by a piece of sponge rubber 14, or other similar resilient material, the sponge rubber performing the function of the coil spring 10 shown in Figs. 1, 4, 5, and 6.

I claim:

1. A savings bank comprising a housing providing a receptacle for coins, a drawer arranged for sliding movement in said housing, said drawer having a coin opening formed therethrough into which coins are introduced edgewise, said coin opening being in the form of a slot which is open at its upper portion at the top face of said drawer and which is inclined downwardly and inwardly of the drawer to the bottom face of said drawer where the lower portion of said slot is open, a flap element attached to said drawer and adapted for movement into and out of a position with respect to said drawer where said flap element closes the end of the coin opening at the lower face of the drawer, said flap element being wholly produced by a strip of inherently flexible material, and means associated with said drawer for preventing complete withdrawal of the drawer from the housing, said means comprising a movable stop pin supported in a vertically disposed opening formed in said drawer and adapted to engage a portion of the housing for preventing complete withdrawal of the drawer from the

housing, said flap element having an opening formed therethrough through which said stop pin extends when the flap element is in a position where it closes the lower end of said coin opening.

2. A savings bank comprising a housing providing a receptacle for coins, a drawer arranged for sliding movement in said housing, said drawer having a coin opening formed therethrough into which coins are introduced edgewise, said coin opening being in the form of a slot which is open at its upper portion at the top face of said drawer and which is inclined downwardly and inwardly of the drawer to the bottom face of said drawer where the lower portion of said slot is open, a flap element attached to said drawer and adapted for movement into and out of a position with respect to said drawer where said flap element closes the end of the coin opening at the lower face of the drawer, said flap element being wholly formed of inherently flexible material, and means associated with said drawer for preventing complete withdrawal of the drawer from the housing, said means comprising a movable stop pin supported in a vertically disposed opening formed in said drawer and adapted to engage a portion

of the housing for preventing complete withdrawal of the drawer from the housing, said flap element having an opening formed therethrough through which said stop pin extends when the flap element is in a position where it closes the lower end of said coin opening, the arrangement and location of said coin opening being such that in a certain position of said drawer with respect to said housing an element may be passed through said coin opening and into the interior of said housing for moving said stop pin upwardly so as to release said drawer for complete withdrawal from said housing, said flap element being adapted to be displaced by said element because of its flexible nature.

FREDERICK L. STEPHENS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,120,514	Stephens	June 14, 1938