Aug. 22, 1939. R. E. JACKSON 2,170,245

SAFETY BILL HANDLING CHEST

Filed May 27, 1937 4 Sheets-Sheet 1

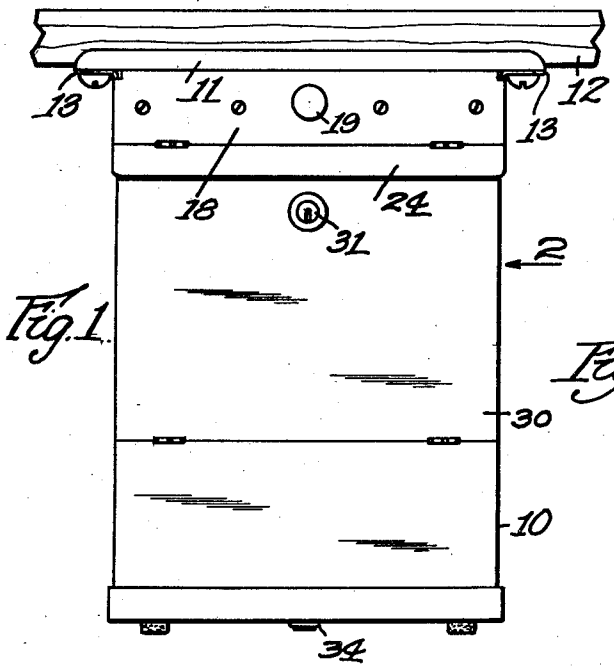


Fig. 1.

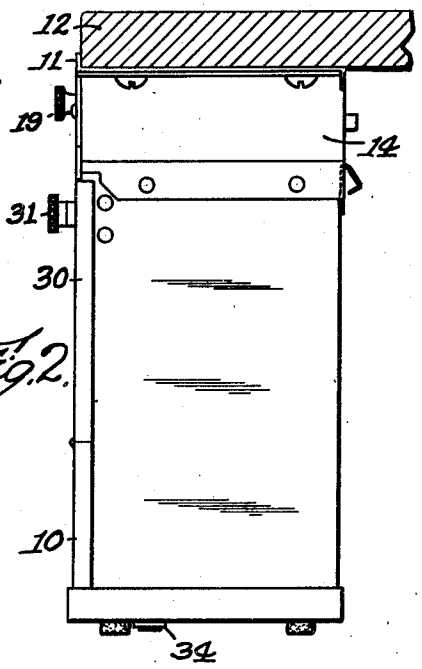


Fig. 2.

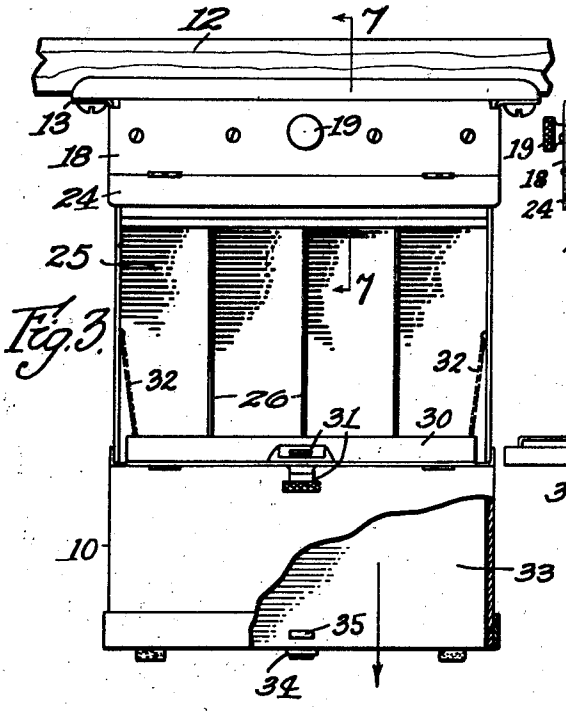


Fig. 3.

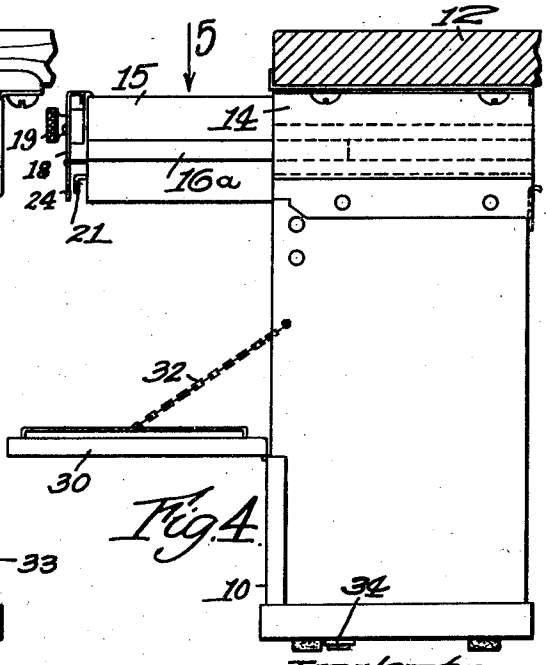


Fig. 4.

Inventor.
Robert E. Jackson
By Attorney

Aug. 22, 1939. R. E. JACKSON 2,170,245

SAFETY BILL HANDLING CHEST

Filed May 27, 1937 4 Sheets-Sheet 2

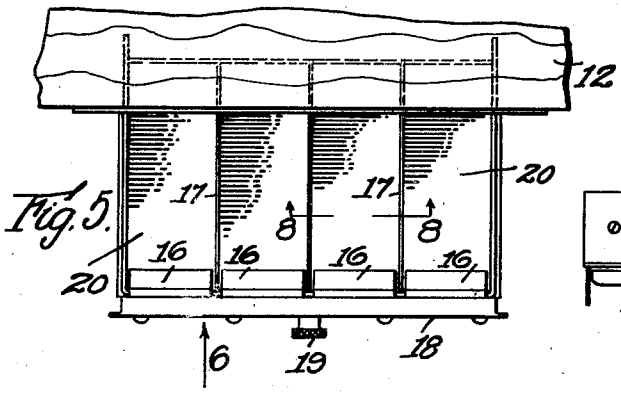


Fig. 5.

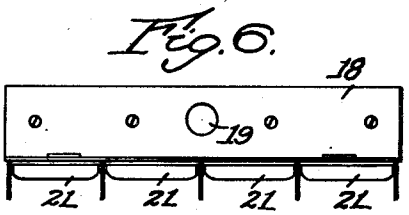


Fig. 6.

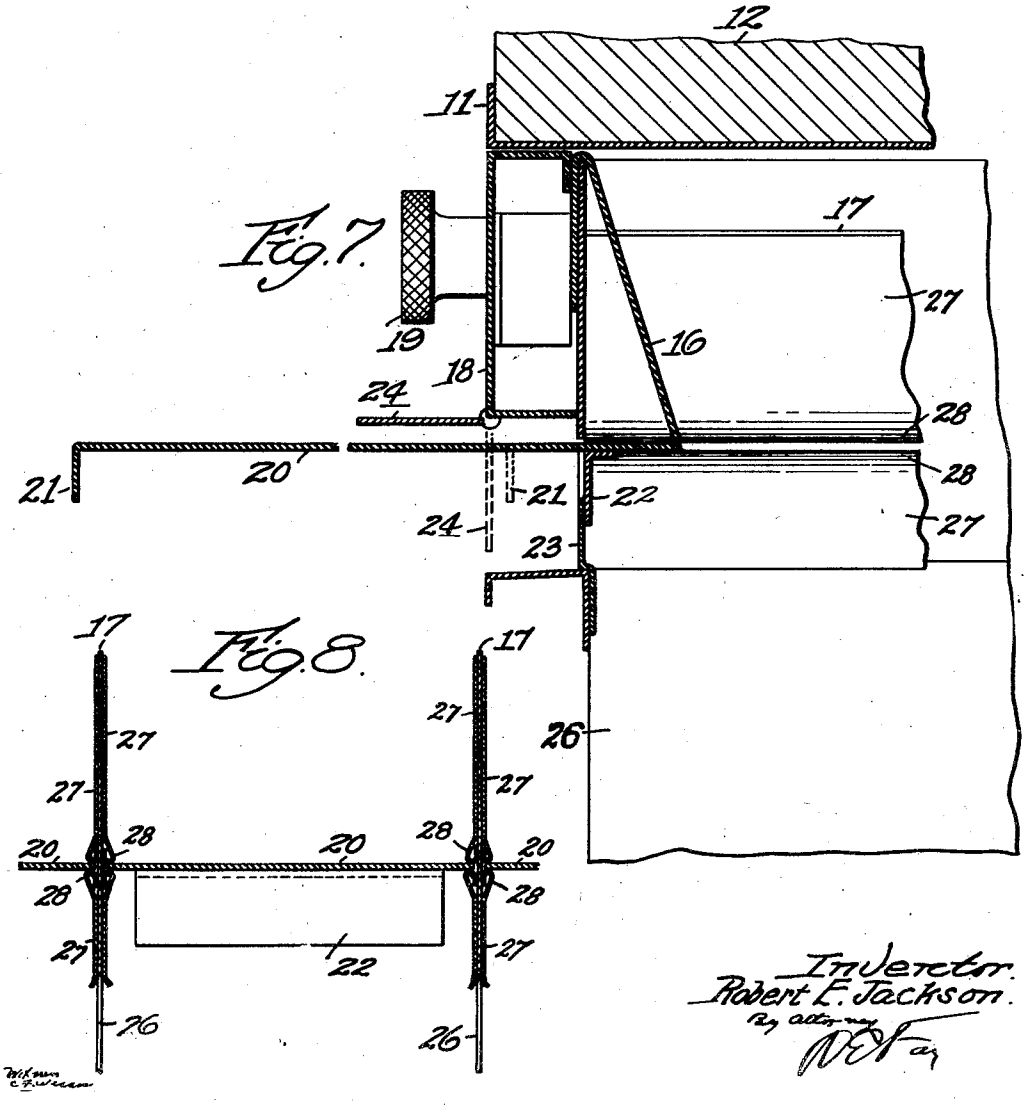


Fig. 7.

Fig. 8.

Inventor.
Robert E. Jackson.
By attorney

Aug. 22, 1939. R. E. JACKSON 2,170,245

SAFETY BILL HANDLING CHEST

Filed May 27, 1937 4 Sheets-Sheet 3

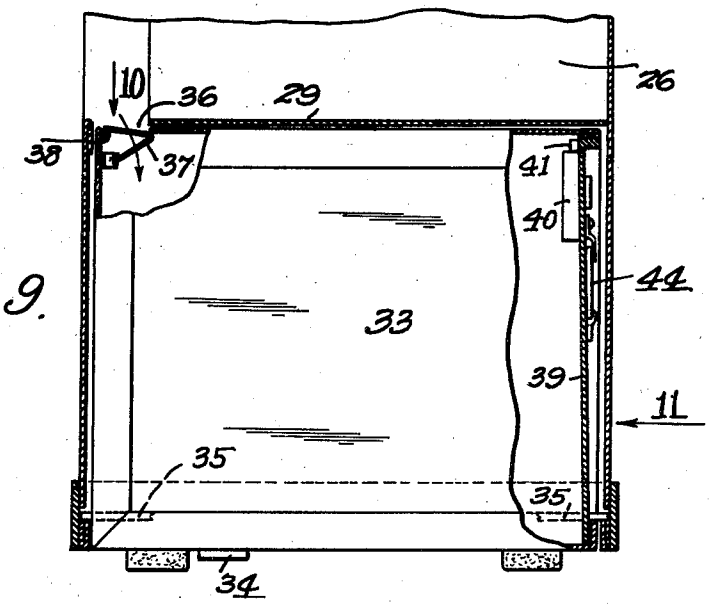
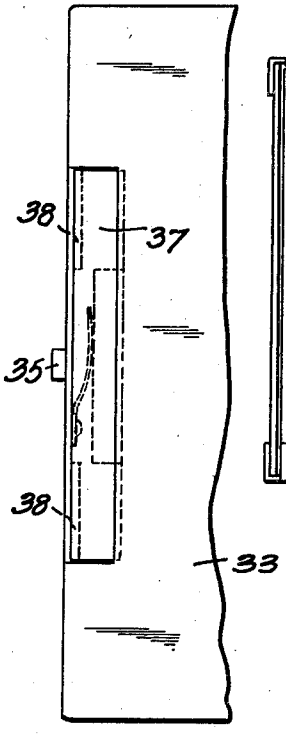


Fig. 9.

Fig. 10.



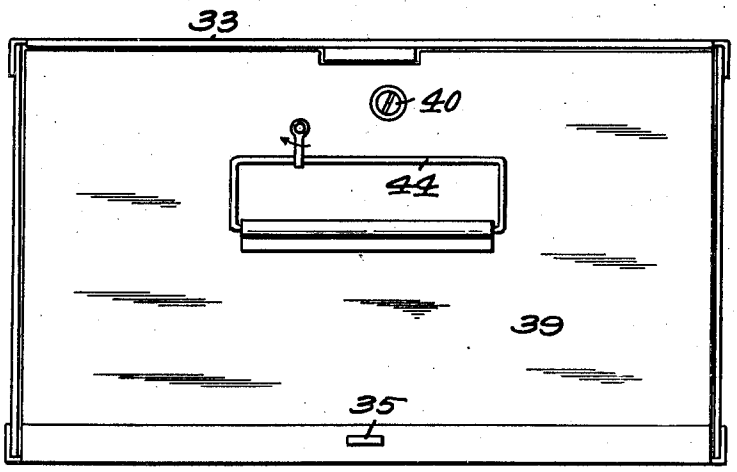


Fig. 11.

Inventor
Robert E. Jackson
By attorney
W&F 4

Witness
C. F. Wesson

Aug. 22, 1939. R. E. JACKSON 2,170,245

SAFETY BILL HANDLING CHEST

Filed May 27, 1937 4 Sheets-Sheet 4

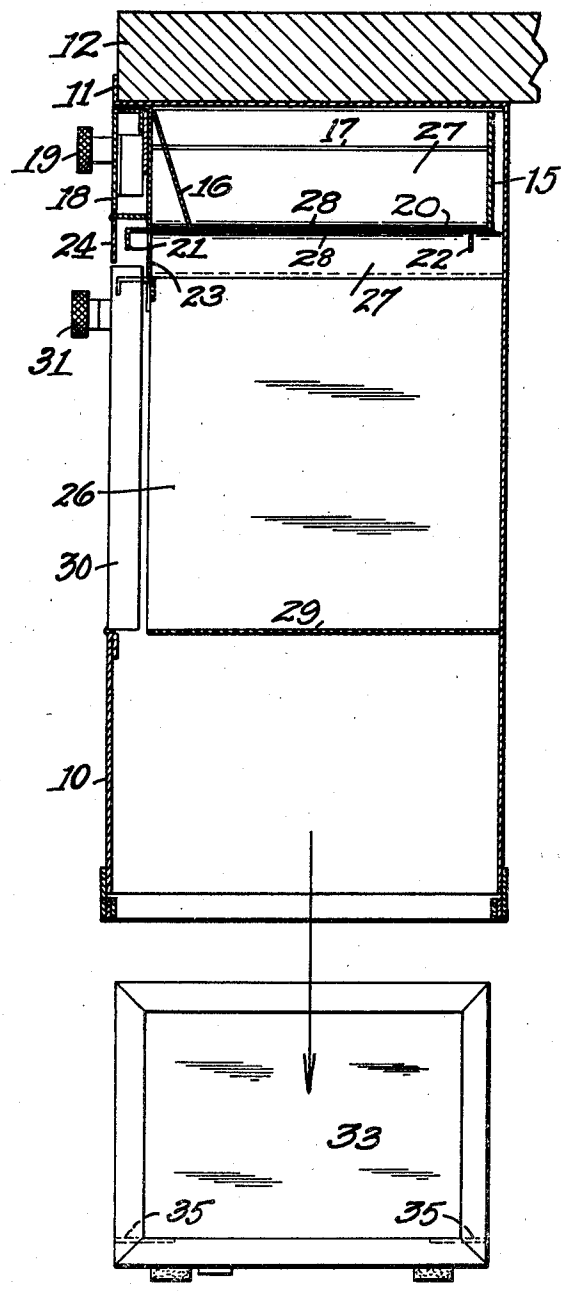


Fig. 12.

Inventor
Robert E. Jackson.
By attorney

Patented Aug. 22, 1939 2,170,245

UNITED STATES PATENT OFFICE

2,170,245

SAFETY BILL HANDLING CHEST

Robert E. Jackson, Dedham, Mass.

Application May 27, 1937, Serial No. 145,157

8 Claims. (Cl. 232—1.4)

This invention relates to the collection and deposition of money, solely in the form of bills, and its concealment and safe handling until it is removed from the cash receptacle to a place of safety.

The principal objects of the invention are to provide means for receiving the bills of different denominations and keeping them separate throughout their course through the device; to provide an extremely simple and convenient means for transferring them from a cash drawer, where they are first deposited, into an intermediate compartment where they are still kept temporarily in separated compartments; to provide this intermediate compartment with a locked door to which the cashier has a key; to employ this door as a shelf on which the cashier works to bundle the bills; to provide a chute at the hinged edge of this shelf through which the bunched bills are deposited by the cashier into a bottom safe, which is locked by a key held by another person than the cashier; to provide this safe in a form in which it fits into the bottom of the external casing and can be applied and removed when unlocked, through the bottom thereof; to provide means for keeping the money in bills, not needed, out of sight; to provide a compact, neat, construction for all these features, all located in a rectangular casing; to provide a construction which will enable the cashier to perform the operations above specified in a minimum of time; to conceal the lock that opens the safe until the safe is removed from the casing, and to provide safety for the bills at all stages.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

Fig. 1 is a front elevation of a preferred embodiment of this invention, shown as mounted on the bottom of the counter, or the like, in convenient position for use;

Fig. 2 is an end view thereof;

Fig. 3 is a view similar to Fig. 1 showing a door open and in operative position and also showing features of the lower part in section;

Fig. 4 is an end view similar to Fig. 2 with the cash drawer drawn out and the door opened as in Fig. 3;

Fig. 5 is a plan of the cash drawer as indicated by the arrow 5 in Fig. 4;

Fig. 6 is a front view of the cash drawer ready for the sliding bottoms to be drawn out, as indicated by the arrow 6 in Fig. 5;

Fig. 7 is a sectional view on enlarged scale on the line 7—7 of Fig. 3;

Fig. 8 is a sectional view on enlarged scale on the line 8—8 of Fig. 5;

Fig. 9 is a sectional view in a vertical plane of the lower part of the casing for supporting all the parts and showing the removable safe in section;

Fig. 10 is a plan of the safe and the bottom of the intermediate compartment as indicated by the arrow 10 in Fig. 9, showing the slot for the introduction of a bundle of bills into the safe;

Fig. 11 is a side view of the safe by itself; and

Fig. 12 is a vertical sectional view with the safe removed.

In order to provide for the above advantages this invention can be embodied in a structure involving an outside casing 10, rectangular in cross section and provided with a top 11 having overhanging projections by which it can be screwed to the underside of a table, desk, or counter 12. This top 11 is firmly secured as by welding or riveting to integral flanges 13 which project out integrally from the top of the side walls of the casing 10.

The upper part of the casing involves end walls 14 having ways inside for a cash drawer 15 which is provided with longitudinal guides 16a operating in said ways. This cash drawer is provided with vertical partitions 17 dividing it into compartments the size of a dollar bill, or other denomination, so that the same can lie flat in the compartment between these partitions. It also has a front slanting wall 16 inside constituting a part of a V-shaped piece of metal, or rather, a separate one of these walls for each compartment facilitating the deposition of the paper money therein. It has a continuous front wall 18 with a knob 19 thereon by which the cash drawer is free to be pulled out or pushed in at any time.

The compartments in the cash drawer are open at the bottom as far as the fixed part of the structure is concerned, but these openings are provided with slides or false bottoms 20, one for each compartment. These slides constitute temporary bottoms for the compartments and when they are pulled out full length they leave the bottoms of the compartments open so that the money may fall down flat out of them. Each one of these slides is provided with a flange 21 extending downwardly at the front of the drawer so that they can be manipulated by the cashier very easily. These slides 20 are provided with

stops 22 and the casing itself is provided with a stop 23 to prevent the entire removal of the slide. Also, when the drawer is partly pulled out, the slides can move with it and be fully pulled out. If a slide is fully pulled out, these stops are in contact with each other and the slide cannot be pulled out any further. On the face of the drawer is a hinged flap 24 which normally comes down over the flanges 21 and entirely conceals them.

The bills deposited as described above from the cash drawer fall into an intermediate compartment 25 formed of the walls of the cashing 10. This is done by the cashier whenever enough bills have accumulated in the cash drawer so they will not be needed for making change. This intermediate compartment 25 is provided with vertical stationary metallic partitions 26 which register with the partitions 17 which allow the bills of different denominations to descend in a pile and keep these denominations separate. This cash drawer and compartment are made to hold one's, two's, five's and ten's respectively. The twenty dollar bills, which are not used for change, do not appear in the cash drawer but are deposited or disposed of in a manner that will appear below.

The way in which the sliding bottoms 20 may be held and guided is shown in Fig. 8. In this case the fixed partitions 17 and 26 are at the bottom of the drawer and top of the compartment 25 respectively, sheet metal members 27 are doubled over at the bottom on each side and at the top on each side of the partition 26 to form loops 28. Said sheet metal members 27 are attached to the partition and furnish said loops, being spaced vertically to form guideways for the sliding bottoms 20. The extra thicknesses of metal are for the purpose of preventing their vibration and their getting out of place.

The intermediate compartment 25 is open at the front which is closed by a door 30 hinged at the bottom. It is provided with an ordinary form of lock and latch 31 at the top for holding it in either locked or unlocked condition at the top. When closed, of course, it covers the open fronts between the partitions 26 and entirely conceals the bills located in these spaces behind the door. When open it swings down into horizontal position, as shown in Figs. 3 and 4, and is held in that position by any desired method, as for example, a pair of chains 32. In this condition it serves as a shelf. The cashier can draw the bills out from between the partitions 26, one at a time on this shelf, bundle them in packs of one hundred dollars each, or any other amout, and then dispose of them as will be described below.

In the casing 10 below the bottoms of the compartments between the partitions 26 which are provided with a bottom 29 is temporarily located a safe 33. This safe is made of strong thin steel. It is intended to be moved up into the open bottom of the casing 10 from the bottom and locked in position by a lock 34. This lock is accessible only from the bottom and, of course, is operated by means of a key which is not in the possession of the cashier but is held by the treasurer or other official. This lock operates two bolts 35 extending horizontally into the walls, preferably the front and back walls, of the casing at the extreme bottom, as shown in these drawings.

The top and all sides of this safe are closed except that in the top at the front side where it comes just adjacent to the hinged edge of the door or shelf 30 is a longitudinal opening 36. Under this opening is a spring-pressed closure 37 which can be depressed about its hinged connection 38 with the front of the casing and form a chute down which the bills that have been bundled can be dropped. They cannot be removed from the safe while it is located in this position within the casing. It is here also that the twenty dollar bills are introduced into the safe when they are first received. The safe, of course, is provided with a door 39 in its side wall which is locked by a lock 40 and a bolt 41. This lock is accessible only when the safe has been removed from the casing. The key is held by the treasurer or other official duly authorized to open the safe, other than the cashier.

This device is placed on the under side of a counter, or the like, as has been stated, and the casing 10 encloses practically all the elements of the device. It is compact and will fit into any box office and is useful, particularly for cashiers in theatres, but is capable of general use. It will fit a counter without cutting away any part of it and constitutes a permanent feature of a box office. It does not take care of any coin money, only the bills. When a bill is to be placed in the cash drawer, it is opened and it is not necessary to unlatch anything in order to do that. Each one, two, five or ten dollar bill is placed in its proper compartment flat. The compartments for the bills are of sufficient size to receive them in flat condition and the inside is nickle plated, or of any smooth surface, to make the handling of the money easier. The drawer is rather shallow as it is not desired that the cashier neglect to deposit the money and let it collect very materially in this cash drawer, but keeps merely enough to make change. After each deposit, the drawer is closed but not locked necessarily. Whenever any compartment has received a sufficient number of bills so that they would be likely to fill it and impede the operation of the drawer the drawer is closed, the flap is lifted and the bottom of a compartment is drawn out by taking hold of one of the flanges 21. This removes the bottom from one of the cash box compartments and necessitates the dropping of all bills from that compartment into the lower compartment or chute for that denomination. These bills fall into the proper chute between the partitions 26 of the intermediate compartment of the casing 10 where, of course, they drop on the bottom thereof and remain there. It is possible to store a good deal of money in the intermediate compartment but this is not recommended as this device is designed for safety. When the slides are being operated the door 30 of the intermediate compartment is kept shut so that the money is hidden from view.

Whenever the cashier has a free period she opens the door 30 so that it comes to a horizontal position, as shown in Figs. 3 and 4, and takes out the bills in one of the compartments between the partitions 26 and bands them into packs of one hundred dollars each, or whatever amount is desired. They are then pushed into the opening 36 of the safe 33, pushing down the closure 37 for that opening. They fall into this safe 33 and that is the last the cashier has to do with them. As stated, the twenty dollar bills are introduced into the safe in the same way whenever there is time to put them away. This makes it possible to keep only a small amount of money in the upper cash drawer, just enough for change.

The person holding the key to the safe 33 unlocks the safe from the bottom at 34, draws the safe down and out, puts in a new safe, locks it,

and carries the old safe, by means of its handle 44, to be banked or the like. All the time this safe has been in position the lock is not accessible but the treasurer can open it with another key at the proper time.

It will be seen that this system keeps the money out of sight, thus providing neatness. It adds speed to the handling of ticket lines and insures security. The cashier is not hindered in any way by the treasurer or other officer when he changes the safe. No lock is visible on the bottom of the safe while it is in position so this adds to the difficulty that would be encountered by anybody tampering with it.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. In a cash drawer for bills, the combination with a casing, of a drawer therein provided with spaces for bills, each space being of the size and shape of a bill and open at the bottom to allow the bills to drop therefrom, an independent bottom for filling each space, a downwardly extending flange on each bottom located outside the front of the drawer, by which any space can be emptied when the drawer is closed, and a hinged flap on the front of the drawer, adapted to be turned down to cover all of said flanges.

2. In a cash drawer for bills, the combination with a casing, of a drawer therein provided with spaces for bills, each space being open at the bottom to allow the bills to drop therefrom, an independent bottom for each space, and a downwardly extending flange on each bottom located outside the front of the drawer, by which any bottom can be withdrawn and the corresponding space will be emptied when the drawer is closed, said bottoms constituting means for preventing the bills from being dropped from all spaces when the drawer is open.

3. In a bill handling chest, the combination with a casing, of a cash drawer located at the top thereof and having vertical partitions dividing it into compartments, a reciprocable bottom for each compartment, the casing having an intermediate compartment directly below the drawer, vertical partitions extending from the top to the bottom of said intermediate compartment directly registering with the partitions in the drawer to furnish chutes for receiving the bills from the corresponding compartments of the drawer, said casing having a door hinged at the bottom closing the entire front of said intermediate compartment, and means for holding said door in horizontal position to serve as a shelf on which the bills can be supported when drawn out of their respective compartments, said intermediate compartment having a bottom spaced from the front to provide a space adjacent to the shelf through which the bills can be dropped from the shelf.

4. In a bill handling chest, the combination of an outer casing, a cash drawer at the top thereof for receiving bills and discharging them through the bottom, an intermediate stationary compartment immediately below the cash drawer and formed by the walls of the casing for receiving the bills from the cash drawer, a door for closing the front of the intermediate compartment, means for holding said door in horizontal position, when open, to serve as a shelf to support said bills when drawn out of the intermediate compartment, said shelf being on a level with the bottom of said intermediate compartment, the intermediate compartment having a space at the front of its bottom adjacent to said shelf for receiving bills from said shelf, a removable safe in the bottom of said casing having a top opening registering with said space, and a spring pressed closure for said opening hinged at the front of said opening, constituting a chute for directing bundles of bills into the safe.

5. In a bill handling chest, the combination of an outer casing, an intermediate stationary compartment, a door for closing the front of the intermediate compartment, means for holding said door in horizontal position, when open, to serve as a shelf to support said bills when drawn out of the intermediate compartment, the intermediate compartment having a space at the front of its bottom adjacent to said shelf for receiving bills from said shelf, a removable safe in the bottom of said casing having a top opening registering with said space, a spring pressed closure for said opening hinged at the front of said opening constituting a chute for directing bundles of bills into the safe, means for locking the door in vertical closed position, means accessible from the bottom of the safe for locking it in the casing, and means normally concealed and protected by a wall of the casing for locking the safe.

6. In a bill handling chest, the combination with a casing having an interior compartment for receiving bills from above, of vertical walls in said compartment for separating the bills according to denomination, a door hinged at the bottom of said compartment and on a level with the bottom thereof when open, means for holding the door in horizontal position when open to serve as a shelf for use in bundling the bills, a safe removably located in the casing below said compartment and having a top opening adjacent to the shelf for receiving bills therefrom, means accessible from the bottom of the safe for locking the safe in the casing, and means inaccessible, when the safe is in the casing, for locking and unlocking the safe.

7. In a cash drawer for bills, the combination with a casing, of a drawer therein having an open top, a series of equally spaced vertical partitions dividing the drawer into spaces of a size to receive bills of different denominations, and an equal number of false bottoms for said spaces, the bottoms being individually and independently slidable outwardly in a horizontal plane while the drawer is closed to remove the support for the bills and allow them to drop into said spaces below said bottoms.

8. In a cash drawer for bills, the combination with a casing, of a drawer therein provided with spaces for bills, each space being open at the bottom to allow the bills to drop therefrom, an independent bottom for each space, movable only in a straight line, and a downwardly extending flange on the front end of each bottom located outside the front of the drawer, by which any bottom can be moved outwardly for emptying a space when the drawer is closed.

ROBERT E. JACKSON.