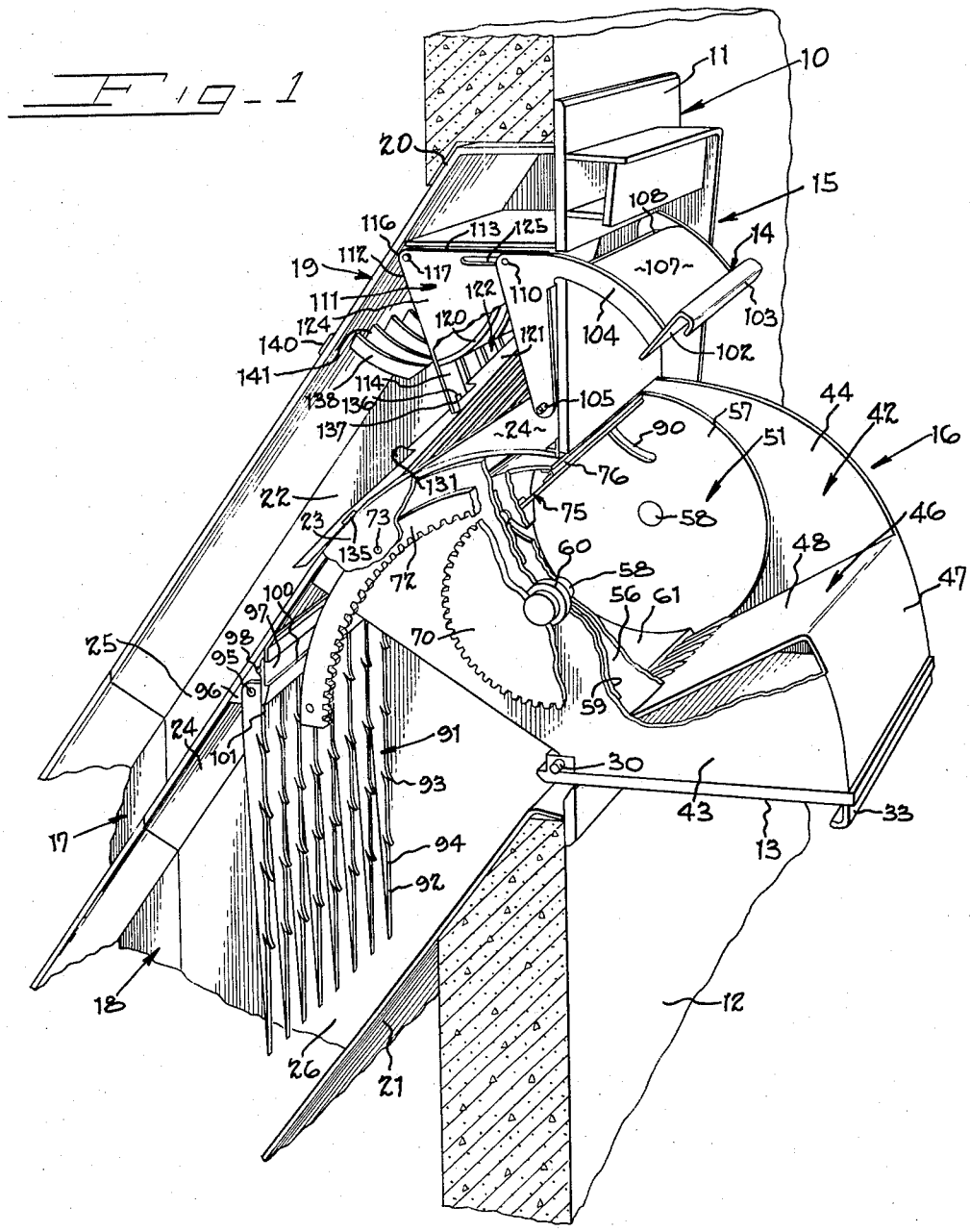
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NIGHT DEPOSITORY

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Fig. 1



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FIG. 2

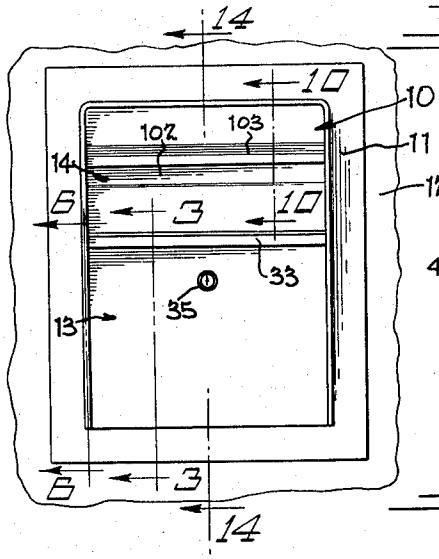


FIG. 3

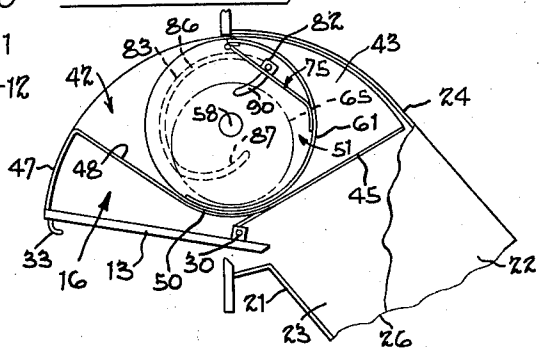


FIG. 4

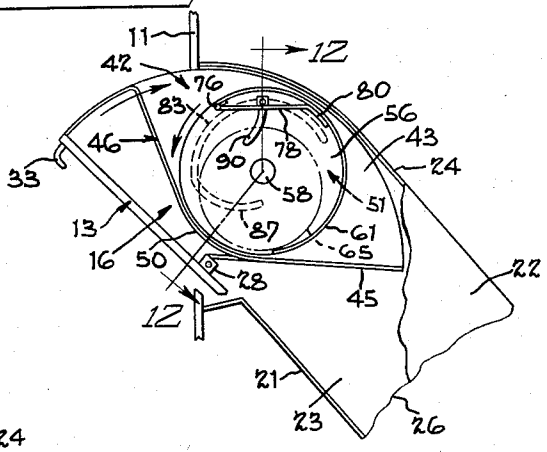


FIG. 5

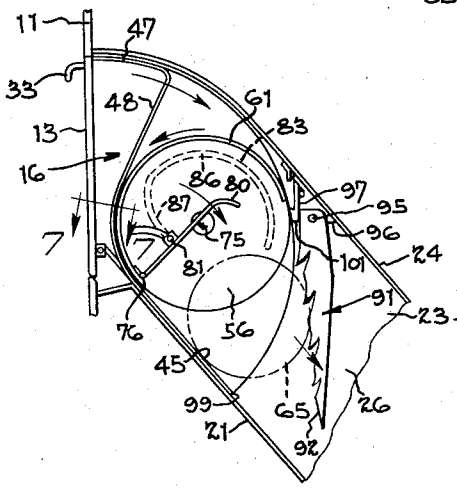


FIG. 6

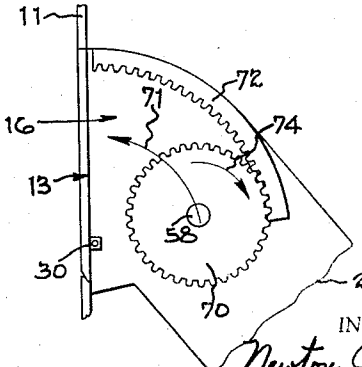
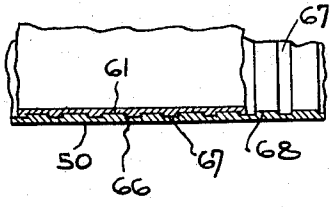


FIG. 7



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Fig. 8

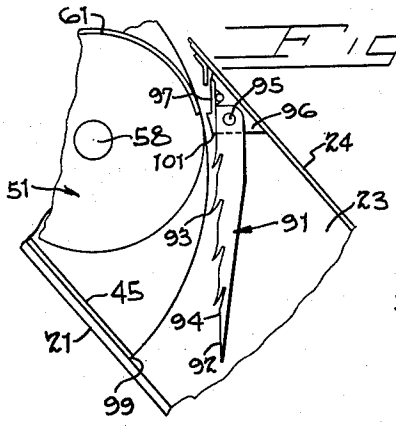


Fig. 9

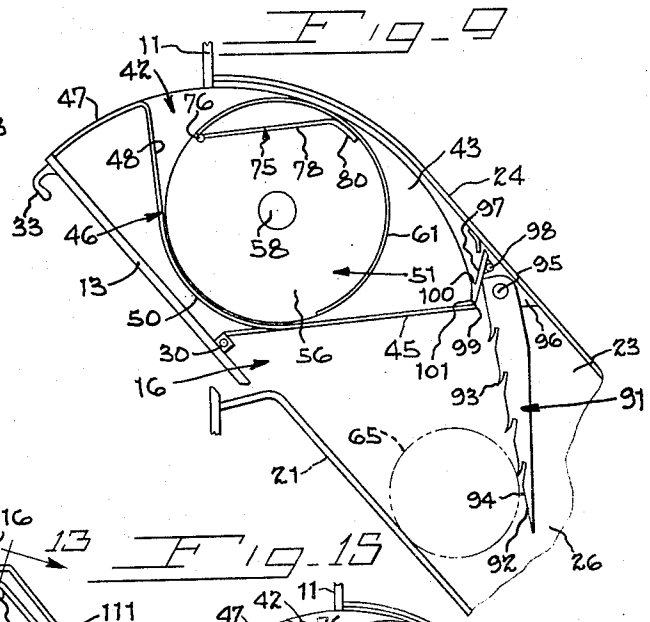


Fig. 10

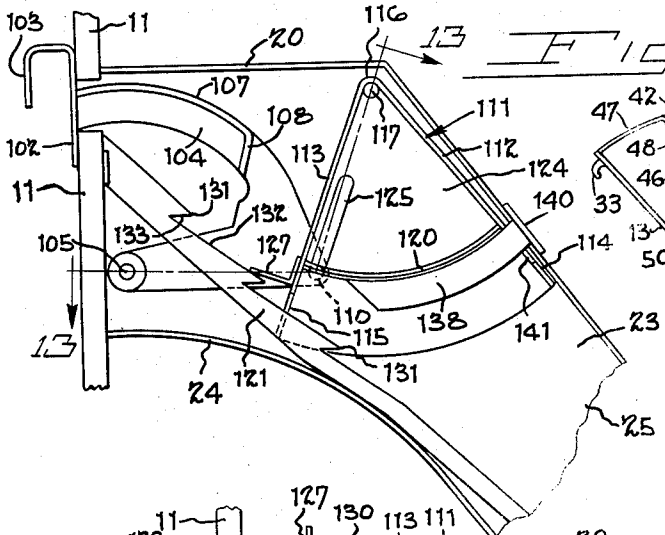


Fig. 15

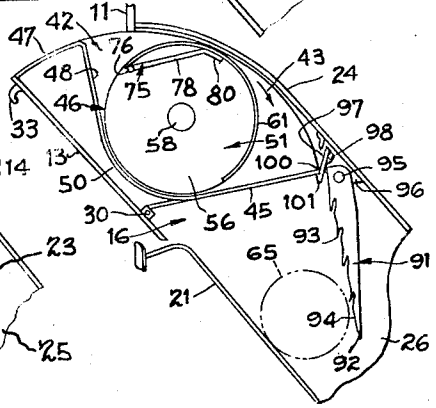
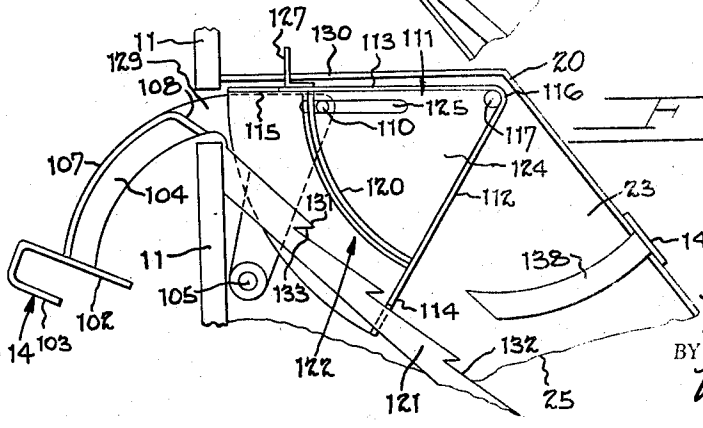


Fig. 11



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Fig. 12

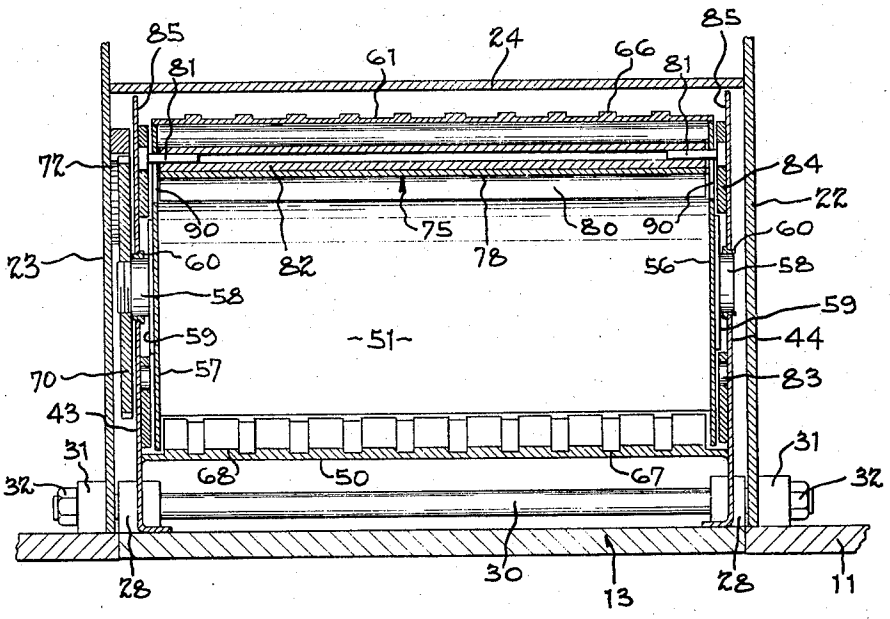
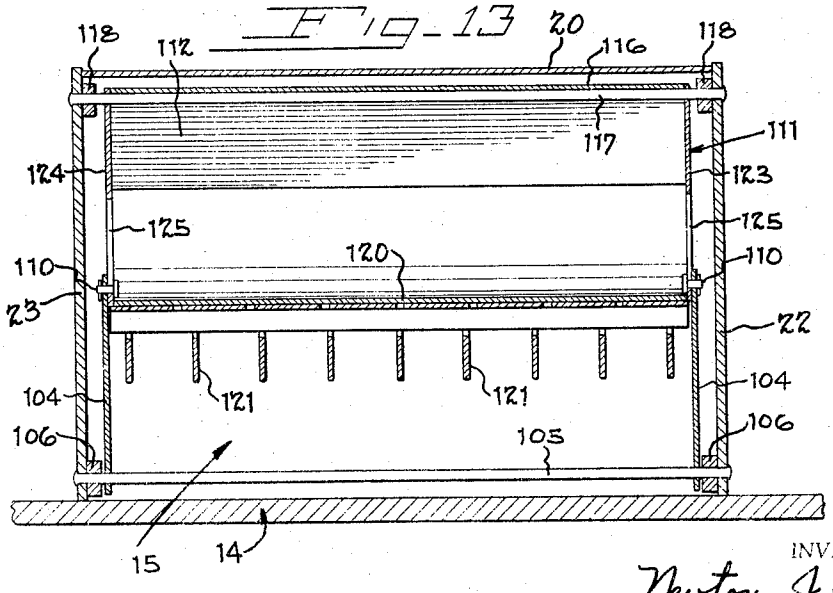


Fig. 13



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NIGHT DEPOSITORY

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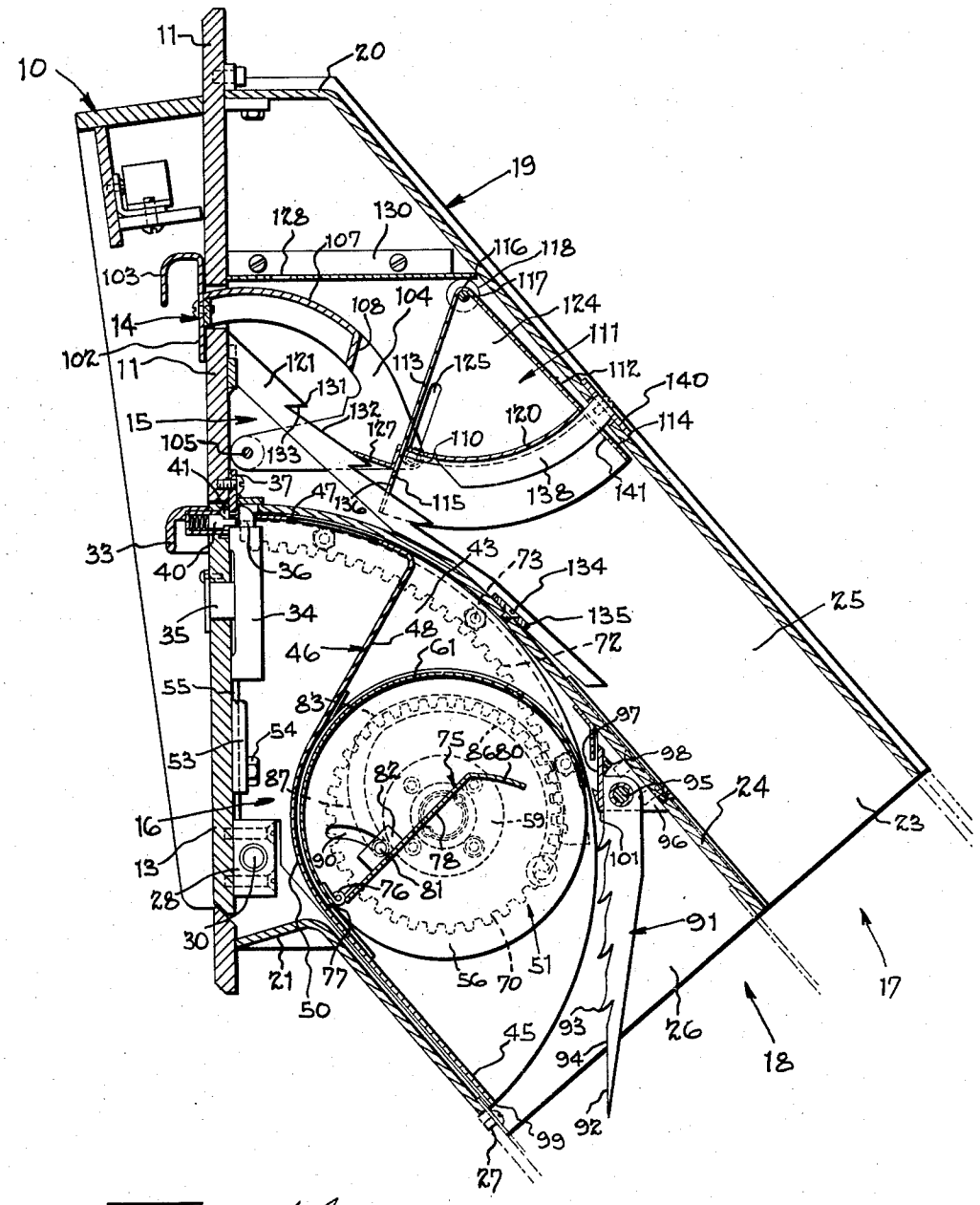


Fig-14

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2,901,165

NIGHT DEPOSITORY

Newton J. Krug, Cincinnati, Ohio, assignor to The Mosler Safe Company, Hamilton, Ohio, a corporation of New York

Application February 27, 1957, Serial No. 642,840

18 Claims. (Cl. 232—44)

This invention relates to night depositories of the type used by banks and other commercial establishments for receiving deposits after regular business hours; and is particularly directed to a night depository having novel means for preventing withdrawal of deposits by unauthorized persons.

A conventional night depository includes a depository head or frame mounted in an outside wall of a building. The depository head is provided with one or more openings into which deposits are inserted. These openings communicate with an inclined chute which, in turn, empties into a receiving safe placed in the basement or some other area inside the building. In using such a depository, a merchant or other customer desiring to make a deposit after normal banking hours places his currency, checks, and the like, in a bag or envelope and drops it into the depository. The following day the customer obtains his bag or envelope from the safe and deposits its contents in a conventional manner.

Inherently, a night depository system of this type which connects with the outside wall of a bank building is more vulnerable to burglarizing than a regular bank safe. In fact, ingenious thieves have devised many fishing and trapping techniques which in the past have enabled them to remove sizable deposits from night depositories.

The principal object of the present invention is to provide a night depository which is effective to prevent deposits from being withdrawn in any manner after the customer has placed them in the depository and has closed the depository door.

The present invention is predicated upon the concept of providing a depository including movable baffle members effective to block the chute entrance, and to positively displace the article deposited to a position in registry with the mouth of an inclined chute. In addition to the baffles, the present depository includes irregularly shaped members adapted to engage the deposit bag, or envelope, in such a manner that if an attempt is made to withdraw an article in a reverse direction outwardly past the baffle members, the article is firmly clamped within the depository and causes the movable baffle member to jam, preventing opening of the depository door.

More particularly, the present invention contemplates a night depository having an envelope receiving section and a bag receiving section. Each of these sections includes a door providing an opening to a passageway, or chute, leading to a receiving safe. Each of the sections further includes a baffle mechanism comprising movable members adapted to be shifted upon movement of the door associated with the section and adapted to provide at all times, a baffle extending across the deposit receiving passageway. The baffle mechanisms are further effective to engage and positively shift the deposited article into the inclined chute. In addition to the baffle mechanisms, each section includes a plurality of serrated members disposed in the deposit passageway and adapted to impale or otherwise grip the deposited article in the event that an attempt is made to withdraw it outwardly past the baffle, after it has been deposited. These serrated members also cooperate with the baffle members to clamp the article so that it becomes wedged in the path of the baffle member restricting movement of that member and preventing opening of the depository door.

It is to be understood that while a preferred embodiment of the depository includes both a bag receiving section and an envelope receiving section, these sections function independently of one another and can be used independently if desired.

It is one concept of the present invention to provide a bag receiving depository comprising a pivotally mounted outer hopper adapted to initially receive a deposit bag, a rotatable inner hopper adapted to gather in any bag which tends to remain in the outer hopper and to provide a baffle across the depository opening and an ejector plate pivotally mounted within the inner hopper and adapted to positively eject the bag from the hoppers into a chute. The outer hopper is connected to the hopper door and pivots with that door. Means are provided for rotating the inner hopper in a direction opposite to the direction of rotation of the outer hopper so that any bag residing in the outer hopper when the door is opened is automatically gathered into the inner hopper as the door is closed. By the time the door is fully closed, the inner and outer hoppers are rotated to positions in which they open into an inclined chute. In addition to these elements, means are provided for shifting the ejector member, as the door is closed, from a position adjacent to an inner hopper wall to a position spaced from the wall. Consequently, the ejector plate, in effect, sweeps across the interior of the inner hopper and positively ejects its contents downwardly into the chute.

The bag receiving section includes a plurality of depending pivotally mounted fingers preferably configurated to include teeth, or similar downwardly facing projections, adapted to catch a bag and prevent its upward withdrawal. As explained below, these fingers are so positioned that a bag which becomes caught on the fingers adjacent to the hoppers is tightly wedged between the inner and outer hoppers when an attempt is made to open the hopper door. A bag which is so wedged, positively prevents the door from being opened so that a thief is unable to gain access to the partially withdrawn bag. The fingers further cooperate with a pivotally mounted locking member which is shifted by the fingers whenever they are pivoted by contact with a bag, trap, or the like. The locking member is shifted into the path of the outer hopper restricting outward movement of the hopper and preventing the hopper door from being opened.

As explained in detail below, the fingers and locking member are highly advantageous since they not only prevent the hopper door from being opened if a bag is trapped near the mouth of the chute but prevent the hopper door from being opened if the receiving safe and chute are completely filled. In this latter event, a depositor is prevented from opening the hopper door to make a deposit, thereby eliminating the possibility that a depositor would place a bag in the depository when it was so full that the bag could not be properly ejected but might remain in a position in which it would be accessible to a thief. Additionally, as explained below, the pivotal fingers and locking member further function to prevent the hopper door from being closed if a trap is present within the hopper and contacts the fingers. This provides an obvious warning to depositors that the depository has been tampered with and that it is not safe to place a bag in it.

The envelope depository section of the unit includes an envelope receiving opening, or slot, formed in the depository head and adapted to be closed by a pivotally mounted flap, or door. This flap, or door, is intercon-

nected with a pivoted baffle member which cooperates with a baffle section on the door to form a solid baffle across the envelope passageway at all times. The baffle member includes two sets of spaced fingers adapted to extend between a plurality of toothed runners which incline downwardly from the slot and form a supporting surface for the deposited envelopes. The baffle is interconnected with the envelope door in such a manner that when the envelope door is open, spaced fingers on one wall of the baffle are disposed above the envelope opening; and when the envelope flap is closed, these fingers move past the opening between spaced runners and positively shift the deposited envelope to the mouth of an inclined chute.

In the preferred embodiment, the pivoted baffle includes a second set of fingers spaced from the first set. Both sets of fingers are shifted outwardly between the runners when the envelope door is open so that, if an envelope is trapped or for some other reason, does not drop into the chute, it is engaged by the second set of fingers and wedged against the downwardly facing teeth of the runners. The envelope is thus firmly held against withdrawal. Furthermore, the envelope prevents further outward movement of the baffle or door.

These and other objects and advantages of the present invention will be more readily apparent from a consideration of the following detailed description of the drawings illustrating a preferred embodiment of the invention. As shown in the drawings:

Figure 1 is a cut-away perspective view of a night depository of the present invention;

Figure 2 is a front elevational view of a night depository;

Figure 3 is a semi-diagrammatic cross-sectional view taken generally along the line **3**—**3** of Figure 2 but showing the depository hopper in its open position;

Figure 4 is a semi-diagrammatic cross-sectional view similar to Figure 3 showing the hopper in a partially closed position;

Figure 5 is a semi-diagrammatic cross-sectional view similar to Figure 3 showing the hopper in its closed position;

Figure 6 is a semi-diagrammatic cross-sectional view taken along line **6**—**6** of Figure 2;

Figure 7 is a partial cross-sectional view taken along line **7**—**7** of Figure 5;

Figure 8 is a partial semi-diagrammatic cross-sectional view through the hopper and chute showing the relationship of the hopper and serrated fingers;

Figure 9 is a semi-diagrammatic cross-sectional view taken through the depository and chute showing the manner in which the serrated fingers prevent withdrawal of a bag from the chute;

Figure 10 is a semi-diagrammatic cross-sectional view taken along line **10**—**10** of Figure 2 showing the envelope door in its closed position;

Figure 11 is a semi-diagrammatic cross-sectional view similar to Figure 10 showing the envelope door in an open position;

Figure 12 is a cross-sectional view taken along line **12**—**12** of Figure 4;

Figure 13 is a cross-sectional view taken along line **13**—**13** of Figure 10;

Figure 14 is a cross-sectional view taken along line **14**—**14** of Figure 2; and

Figure 15 is a semi-diagrammatic cross-sectional view similar to Figure 9 showing the manner in which closure of the hopper and door is blocked by the locking member.

As best shown in Figures 1 and 14, one preferred form of night depository unit **10** embodying the principles of the present invention includes a frame **11** adapted to be mounted over an opening in a masonry wall **12** of a bank or other commercial establishment. The frame has two vertically spaced door openings normally closed by a hopper door **13**, and an envelope door **14**, respectively associated with the bag receiving section **16** and envelope

receiving section **15** of the depository. Envelope receiving section **15** and bag receiving section **16** communicate with inclined chutes **17** and **18** which lead from the depository to a suitable receiving safe (not shown) disposed within the building. While the particular embodiment shown is a dual purpose unit, i.e.: one adapted to receive both envelope deposits and bag deposits; it is to be understood that either the envelope receiving section, or the bag receiving section, can be used separately if desired.

Outer frame **11** forms part of the depository housing **19** which also includes an upper wall **20**, a lower wall **21**, and side walls **22** and **23**. A transverse arcuate divider wall **24** extends between the side walls to define an envelope passageway **25** and a bag passageway **26**. These passageways respectively communicate with inclined chutes **17** and **18** which are bolted, or otherwise secured, to the housing as at **27**.

Bag receiving section **16** of the depository includes hopper door **13** formed of stainless steel or the like. The inner surface of this hopper door carries journal blocks **28**—**28** which are bolted or otherwise secured to the inner face of the door adjacent to the lower edge thereof. These blocks receive an elongated shaft **30** which passes through the bearing blocks and is supported in bosses **31** mounted on the inner surface of frame **11**; outwardly of side walls **22** and **23**. The outer ends of shaft **30** are preferably threaded to receive nuts **32** for holding the shaft in assembled relation with the frame and door.

The upper edge of door **13** carries a pull member **33** and a key actuated auxiliary lock **34**. This lock, which constitutes no part of the present invention, includes a key receiving cylinder **35** extending through an opening in the door and an upwardly extending latch member **36** adapted to engage a keeper plate **37** bolted, or otherwise secured, to the inner face of frame **11**. The upper edge of the door also carries a spring loaded detent member **40** adapted to be received in a suitable recess **41** formed in the door frame **11**. Detent **40** is effective to prevent a customer from removing his key from the lock until the door is relocked after it has once been opened. That is, the detent cooperates with the lock to hold the key in the lock from the time the door is unlocked and opened until the detent mechanism is tripped when the door is again closed. Lock **34** is constructed so that the key cannot be withdrawn from the lock when the latch member **36** is retracted. When the key is inserted in the lock to retract latch member **36** and the door is pulled outwardly, detent member **40** is shifted under the influence of its spring to engage the latch **36** and prevent it from moving outwardly. Thus, the key is held in the lock until the door is closed when the detent engages a portion of the housing and is disengaged from the latch member **36** so that that member moves outwardly permitting the lock to be turned and the key withdrawn.

Door **13** carries an outer hopper **42** which is adapted to receive a deposit bag when the door is pivoted to its open position, shown in Figures 1 and 3. Hopper **42** includes side walls **43** and **44** and inner wall **45** and an outer wall **46**. Outer wall **46** includes an arcuate baffle portion **47** extending inwardly from the upper edge of door **13** and a tray section **48** extending from arcuate section **47** toward the lower edge of door **13**. As best shown in Figure 2, tray section **48** of wall **46** is joined to inner wall **45** through an arcuate wall portion **50** which as explained below, is preferably of substantially the same radius as inner hopper **51**. Outer hopper **42** is secured to door **13** in any suitable manner, such as by means of clamping shoes **53** which are bolted to the inner face of door **13** as by bolts **54** and clamp flanges **55** of side walls **43** and **44** against the inner face of the door.

Outer hopper **42** carries an inner hopper **51**, the inner hopper being rotatably supported within the outer hopper. More particularly, inner hopper **51** comprises side walls **56** and **57**. Shafts **58** having radial flanges **59** are

secured to the outer surfaces of the side walls as by means of bolts passing through the flanges and threadably engaging the side walls. Shafts **58** are rotatably journalled in bushings **60** press-fit, or otherwise mounted, in suitable openings formed in side walls **43** and **44** of the outer hopper.

The inner hopper **51** also includes an arcuate transverse wall **61** extending between side walls **56** and **57** of the hopper. In the particular embodiment shown, this transverse wall extends along approximately a semi-circle of substantially the same radius as wall **50** of the outer hopper. Functionally, arcuate transverse wall **61** extends over a small enough arc so that a deposit bag **65** is readily received within the inner hopper and is readily discharged therefrom; and is of sufficient extent so that it blocks off access to the chute when the hopper door is completely open as shown in Figure 3, and in its intermediate positions as shown in Figure 4. The outer surface of transverse wall **61** is provided with a plurality of circumferentially extending spaced ribs **66**. These ribs are adapted to be received within a like plurality of grooves **67** formed between spaced strips **68** welded to, or formed, integral with portions of inner wall **45**, tray **48**, and arcuate wall **50** of the outer hopper. Ribs **66** and strips **68** function to prevent shim members and similar trapping elements from being inserted between the inner and outer hopper.

In addition to these elements, the inner hopper **51** carries a large gear **70** forming part of the drive means for rotating the inner hopper in a direction counter to the direction of pivotal movement of the outer hopper. As best shown in Figure 12, gear **70** is mounted upon a threaded extension of shaft **58** joined to wall **43**. Gear **70** is fixed relative to the shaft in any suitable manner, such as by means of keys, set screws, or the like. Gear **70** is thus mounted concentric with the axis of rotation of inner hopper **51** and is disposed for engagement with an arcuate rack **72** secured in any suitable manner, such as by means of bolts **73**, to side wall **23** of the depository housing. As shown diagrammatically in Figure 6, when hopper door **13** and outer hopper **42** are pivoted outwardly about shaft **30**, shafts **58—58** and gear **70** are shifted along an arc indicated by arrow **71**. Gear **70** is thus shifted relative to stationary rack **72** and is rotated in the direction indicated by arrow **74**.

Inner hopper **51** also carries an ejector plate **75**. This ejector plate extends substantially the entire distance across inner hopper **51** and is pivotally mounted as by means of hinges **76** adjacent to edge **77** of arcuate transverse wall **61** of the hopper. As best shown in Figure 14, edge **77** is disposed beneath the remainder of arcuate wall **61** when hopper door **13** is closed. In the particular embodiment shown, ejector plate **75** includes a straight section **78** extending across a chord of arcuate wall **61** and a short curved endwise section **80** adapted to lie against this wall as diagrammatically shown in Figures 3, 4 and 9.

Cam means are provided for shifting ejector plate **75** from a position adjacent to arcuate wall **61** when the hopper door is open, to a position spaced from the wall when the hopper is closed. As shown in Figure 5, when moving to this latter position, the ejector plate functions to sweep the inner hopper and positively eject its contents into discharge chute **18**. The cam means for effecting movement of ejector plate **75** is shown in Figure 12 and includes followers **81** carried by a bar **82** having a longitudinal bore, the bar being welded or otherwise secured to the rear face of the ejector plate. Followers **81** are disposed for engagement with grooves **83** formed in cam plates **84**, these cam plates being welded or otherwise mounted upon the inner faces **85** of outer hopper walls **43** and **44**. As shown in Figures 3–5 and Figure 14, each of the cam grooves **83** includes a generally circular portion **86** and an inwardly directed portion **87**. Followers **81** are disposed to engage generally circular sections **86** when the hopper door is open, as shown in Figure 3, and to engage inwardly directed portions **87** when the hopper door is closed, as shown in Figure 5. The interengagement of followers **81** and cam grooves **83** is thus effective to cause pivotal movement of ejector plate **75** away from hopper wall **61** as the hopper door **13** is closed. It is to be understood that inner hopper end walls **56** and **57** are provided with arcuate grooves **90** for receiving followers **81** and accommodating their pivotal movements relative to the inner hopper.

Bag receiving section **16** of the depository also includes a plurality of depending serrated fingers **91**. A preferred configuration of these fingers is shown in Figures 1 and 14. As there shown, each of the fingers **91** is generally tapered to form a depending point **92**. Each of the fingers also includes a plurality of downwardly facing pointed teeth **93**; the end of each tooth extends outwardly beyond the adjacent face portion **94** of the finger. These fingers are spaced transversely of the bag passageway **26** and are pivotally mounted adjacent to their upper ends upon a transverse rod **95** carried by suitable brackets **96** bolted, or otherwise secured, to upper wall **24** of the bag receiving unit. A transverse locking plate **97**, pivotally mounted on pin **98** carried by brackets **96** extends across the upper edges of fingers **91**. This locking plate is disposed closely adjacent to the arc of travel of edge **99** of outer hopper wall **45** and includes an outwardly facing shoulder **100**, which as explained below, is adapted upon pivotal movement of fingers **91** to engage the under surface of the end of wall **45**. This is best shown in Figure 15. Also as explained below, the free end **101** of locking plate **97** is adapted to be pivoted outwardly into engagement with the upper surface of edge **99** of hopper wall **45**, as shown in Figure 9.

Envelope receiving section **15** of the depository is provided with a door or closure member **14**. As best shown in Figures 1 and 14, door **14** comprises a vertically extending closure plate **102** having a pull **103** formed on the upper edge thereof. Closure plate **102** is bolted, or otherwise secured, to handle arms **104**, the handle arms being pivotally mounted upon an elongated shaft **105** carried by blocks **106** secured to side walls **22** and **23** of the depository frame. Arms **104** are substantially U-shaped and carry at their upper edges an arcuate baffle plate **107**, the inner end of which terminates in downwardly extending lip **108**. Door arms **104** additionally carry pins **110** providing an interconnection between the arms and pivoted baffle member **111**.

More particularly, pivoted baffle member **111** comprises two walls **112** and **113** having spaced lower ends **114** and **115**. In the embodiment shown, these arms are angulated with respect to one another forming an inverted V. The apex **116** of the V is pivotally supported on transverse rod **117** carried by blocks **118** mounted upon side walls **22** and **23** of the depository frame. Walls **112** and **113** carry an arcuate guide panel **120** which extends between the walls and defines with the walls and spaced runner members **121**, an envelope receiving compartment **122** best shown in Figure 11. Guide panel **120** preferably includes a plurality of spaced peripheral grooves adapted to receive comb strips **138** as explained below. Pivoted baffle **111** further includes side walls **123** and **124** extending between spaced walls **112** and **113** and including slots **125** adapted to slidably receive pins **110**. Outer wall **113** of the pivoted baffle member **111** also carries an outwardly extending transverse flange **127**. This flange is adapted to pass upwardly through slot **128** in plate **130** to prevent envelopes from inadvertently being inserted above wall **113**, as is best shown in Fig. ure 11.

A plurality of runners **121** are spaced transversely of envelope pasageway **122** and are inclined downwardly from envelope receiving slot **129**. These runners are preferably provided with a series of downward facing teeth **131** formed on the upper edges of the runners. As best shown in Figure 14, each of the teeth **131** extends

outwardly beyond the adjacent edge portion **132** of the runner and includes an undercut edge **133**. The lower edges of the runners are notched as at **134** for receiving a mounting strip **135** which is welded to the runners and bolted to divider wall **124**. The lower ends **114** and **115** of baffle walls **112** and **113** are provided with a plurality of slots **136** and fingers **137**. The slots are adapted to receive stationary runners **121**; while fingers **137** are adapted to pass between adjacent runners. In the preferred embodiment, fingers **137** extend an appreciable distance below the upper edges of runners **121** and slots **136** barely clear teeth **131** so that the walls of the pivoted hopper effectively comb a substantial length of the runners.

In addition to these elements, the envelope receiving section of the depository includes a plurality of spaced arcuate comb strips **138** secured to a plate **140**, bolted or otherwise mounted upon the upper wall **20** of the housing. As best shown in Figures 10 and 14, these comb strips pass through suitable openings **141** in rear wall **112** of the rotatable baffle member and are received within the peripheral grooves formed in arcuate guide panel **120**. These comb members are effective to positively remove any envelope or other article adhering to panel **120** and to discharge the article downwardly into chute **17**.

In operation, if a customer desires to deposit a bag in the depository, he first inserts a key in lock **34** and unlocks hopper door **13**. The depositor then grasps handle **33** and pulls hopper door **13** outwardly, in a counterclockwise direction in Figures 3–5 and 14. As the hopper door pivots outwardly about hinge pins **30**, the outer hopper which is carried by the door also pivots outwardly carrying with it inner hopper **51**. As the inner hopper is shifted outwardly, gear **70** tracks upon arcuate rack **72** so that inner hopper **51** is rotated about shafts **58** in a direction opposite to the pivotal movement of the outer hopper (clockwise in Figures 3–5 and 14).

During initial outward movement of the door, the bag receiving opening remains blocked by the arcuate baffle section **47** of the outer hopper. As door **13** is opened further, to a position corresponding to that shown in Figure 4, inner hopper **51** is rotated to a position in which arcuate wall **61** with wall **45** completely blocks entry to chute **18**. This arcuate wall **61** continues to block chute **18** as the hopper door **13** is pivoted to its completely open position, as shown in Figures 1 and 3. When the hopper door has been completely opened, the customer places a deposit bag (indicated at **65** in Figures 3–5 and 9) on tray portion **48** of the outer hopper and pivots the hopper door upwardly, as indicated in Figure 4.

As the hopper door and outer hopper are pivoted upwardly, inner hopper **51** is rotated in counterclockwise direction about shafts **58**. Deposit bag **65** rolls downwardly into contact with arcuate wall portion **50** of the outer hopper and transverse wall **61** of the inner hopper. As shown in Figure 4, in this portion of the operating cycle, ejector plate **75** is held against wall **61** of the inner hopper. As hopper door **13** is moved toward its closed position illustrated in Figure 5, the inner hopper continues to rotate until the opening between the spaced edges of transverse wall **61** faces downwardly in registry with the open space between hopper walls **45** and **46** and the mouth of chute **18**. During the final movement of the door, ejector plate **75** is pivoted downwardly away from wall **61** to force bag **65** from the hoppers. The bag then normally slides downwardly through chute **18** into the storage vault.

It is to be noted that during the entire operating cycle of the bag depositing mechanism, one or more baffle members is interposed between the bag opening in frame **11** and chute **18**. Consequently, there is no direct access path by means of which articles can be withdrawn from the chute. In the event that a thief should insert a trap in the deposit, for example, by placing two-sided adhesive tape on the walls of the inner or outer hopper, or by inserting thin curved metal strips or a thread or paper trap in the hoppers, such a trap is rendered ineffective because the inner hopper in its rotation gathers in the depository bag, and then the ejector plate **75** positively forces the bag downwardly from the hoppers. However, should the bag still be restrained by some line or other element from dropping into the chute, upward withdrawal of the bag is effectively resisted by serrated fingers **93** on arms **91**. The bag tends to become impaled upon these fingers and is held in a position such that when the thief attempts to open hopper door **13** the bag is caught between the downwardly advancing edge of inner hopper wall **61** and upwardly moving wall **45** of the outer hopper. Thus, the inner hopper wall **61** actually functions somewhat like a dull shear blade, tightly clamping the bag against any efforts to remove it.

Should the bag become trapped at a point further along the bag passageway, as shown in Figure 9, a slightly different action takes place. In this position, the inner and outer hopper walls clear the trapped bag and no wedging action takes place. However, the bag displaces depending arms **91** to the right causing latch member **97** to be pivoted in a clockwise direction about shaft **98**. The lowermost edge **101** of the locking member is thus shifted into the path of movement of wall **45** of the outer hopper, and effectively prevents the hopper from being opened beyond the position shown in Figure 9. In this position the inner hopper and wall **45** provide a baffle extending completely across bag passageway **26** preventing any access to the deposit bag.

It will be appreciated that the action of depending arms **91** described above also is effective to prevent a user of the depository from inserting a bag if the depository is completely filled so that the last bag previously deposited rests in the position shown in Figure 9.

Additionally, depending arms **91** and locking bar **97** function to prevent the hopper door from closing if the presence of a trap or the like within the depository causes arms **91** to be displaced. If these arms are shifted after the hopper door has been opened and hopper wall **45** has passed upwardly beyond the locking bar, closing, or clockwise, movement of the hopper is restricted by the engagement of shoulder **100** with the undersurface of hopper wall **45**. Consequently, a depositor upon noting that the hopper door could not be closed would realize that something was wrong, and would not leave his deposit bag in the hopper.

The envelope receiving section **15** of the depository functions completely independently of the bag receiving section. A customer wishing to place an envelope in the envelope section, pulls envelope door outwardly to the position shown in Figures 1 and 11. As the envelope door is pulled outwardly, arms **104** pivot about shaft **105**; and the engagement of connecting pins **110** with slots **125** in the side walls of the baffle member **111** forces the baffle member to pivot upwardly in a clockwise direction in Figures 10, 11 and 14 to a position in which wall **113** is disposed above the slot and lies adjacent to upper plate **130**. The envelope is then inserted through envelope receiving slot **129** and enters the space defined by arcuate wall **120**, runners **121**, and spaced end walls **114** and **115** of the pivoted baffle member. The envelope cannot be inserted above wall **113** because of flange **127** which extends upwardly through a slot in plate **130**. After the envelope has been inserted, the door which is preferably counter-weighted by the configuration of arms **104** and the pivoted baffle member, closes automatically. It is to be understood that the door can also be closed by pushing it upwardly; and that at times this may be necessary to forcibly eject an envelope stuck on runners **121**. As the door closes, pivoted baffle member **111** swings downwardly in a counterclock-

wise direction and the envelope slides down runners **121** and down inclined chute **17** into the receiving safe.

As indicated above, one of the most common methods used by thieves to trap envelope deposits, is to make a U-shaped trap of spring steel, or paper, and place it within the envelope slot where it catches deposited envelopes, which are subsequently withdrawn. Alternatively, a thief may place a small bag or the like in the envelope slot, the bag being supported by string or the like. Another trapping technique involves the insertion of shims of very thin spring steel through the envelope slot. These shims are bent to form hooks which catch an envelope and hold it in a position in which it can subsequently be grasped and withdrawn. In still another frequently used trapping method, sticky two-sided tape is placed inside the depository to catch envelopes just within the mouth of the depository.

The present envelope depository prevents an envelope from being withdrawn by any of these trapping techniques, or fishing techniques, in which hooked lines are dropped through the slot and used to snare envelopes which are pulled outwardly through the slot. In the first place, arcuate baffle wall **107** on the envelope door and pivoted baffle member **111** cooperate so that a solid baffle is at all times placed across the envelope passageway, rendering it impossible to withdraw envelopes from the chute outwardly through the envelope slot. Moreover, when an envelope has been placed in the slot, the spaced fingers **137** on end **115** of wall **113** which pass between spaced runner members **121** positively force the envelope downwardly to a position in which it can slide into chute **17**; thereafter scraper blades **138** passing through the grooves in arcuate baffle wall **120** force any envelope adhering to that surface to drop into chute **17**. If an envelope should be trapped in some manner beyond the path of fingers **137** on wall **133** and an attempt should be made to withdraw the envelope, the envelope will catch upon the undercut faces of teeth **131** on runners **121**. As the thief attempts to open the envelope door to grasp the envelope, the fingers **137** on wall **112** of the pivotal baffle will engage the envelope and will firmly wedge the envelope against the runners to prevent further opening of the door or withdrawal of the envelope.

From the foregoing discussion of the general principles of the present invention and the above discussion of a preferred embodiment, those skilled in the art will readily comprehend various modifications to which the invention is susceptible.

Having described my invention I claim:

1. A night depository comprising a housing having a bag receiving opening formed therein, a door for closing said opening, an outer hopper pivotally mounted within said housing and adapted to be rotated outwardly through said opening, an inner hopper disposed within said outer hopper, said inner hopper having an arcuate transverse wall and being rotatably carried by said outer hopper, means operable upon the closing of said door for rotating said inner hopper relative to said outer hopper, whereby the arcuate wall of said inner hopper is shifted in close proximity to a wall of said outer hopper, an ejector member pivotally mounted within said inner hopper, and means for shifting said ejector member from a position adjacent to one wall of said inner hopper to a position spaced therefrom, whereby said transverse wall of said inner hopper sweeps a wall of said outer hopper and said ejector member sweeps said inner hopper.

2. A depository comprising a housing having a bag receiving opening, a door pivotally secured to said housing and adapted to close said bag receiving opening, an outer hopper mounted within said housing and carried by said door, an inner hopper rotatably supported within said outer hopper, said inner hopper having an arcuate transverse wall, means operable upon the closing of said door for rotating said inner hopper relative to said outer hopper, whereby the arcuate transverse wall of said inner hopper is shifted in close proximity to a wall of the outer hopper, an ejector member mounted within said inner hopper and means operable when said door is closed for shifting said ejector member from a position adjacent to a wall of said inner hopper to a second position remote therefrom, whereby said transverse wall of said inner hopper sweeps said outer hopper and said ejector member sweeps said inner hopper.

3. A depository comprising a housing having a bag receiving opening, a door adapted to close said bag receiving opening, an outer hopper pivotally mounted within said housing, an inner hopper rotatably supported within said outer hopper, said inner hopper having an arcuate transverse wall, means operable upon the closing of said door for rotating said inner hopper in a direction opposite to the pivotal movement of said outer hopper, whereby the arcuate wall of said inner hopper is shifted in close proximity to a wall of said outer hopper, an ejector member mounted within said inner hopper, and means operable when said door is closed for shifting said ejector member from a position adjacent to a wall of said inner hopper to a second position remote therefrom whereby said transverse wall of said inner hopper sweeps said outer hopper and said ejector member sweeps said inner hopper.

4. A depository comprising a housing having a bag receiving opening, a door adapted to close said bag receiving opening, an outer hopper pivotally mounted within said housing, an inner hopper rotatably supported within said outer hopper, means for rotating said inner hopper in a direction opposite to the pivotal movement of said outer hopper, an ejector member mounted within said inner hopper, and means operable when said door is closed for shifting said ejector member from a position adjacent to a wall of said inner hopper to a second position remote therefrom, said first named means comprising an arcuate stationary rack, means mounting said rack upon said housing, a pinion disposed for engagement with said rack, and means interconnecting said pinion and said inner hopper.

5. A depository comprising a housing having a bag receiving opening, a door adapted to close said bag receiving opening, an outer hopper pivotally mounted within said housing, an inner hopper, shafts secured to said inner hopper and journalled in said outer hopper, means for rotating said inner hopper in a direction opposite to the pivotal movement of said outer hopper, an ejector member mounted within said inner hopper, and means operable when said door is closed for shifting said ejector member from a position adjacent to a wall of said inner hopper to a second position remote therefrom, said first named means comprising an arcuate stationary rack, means mounting said rack upon said housing, and a pinion mounted upon one of said shafts in engagement with said rack.

6. A depository comprising a housing having a bag receiving opening, a door adapted to close said bag receiving opening, an outer hopper mounted on the interior of said housing, an inner hopper rotatably supported within said outer hopper, means operable upon the closing of said door for rotating said inner hopper relative to said outer hopper, said inner hopper including a transverse wall, said transverse wall being shifted upon rotation of said inner hopper in close proximity to a wall of said outer hopper, an ejector plate mounted within said inner hopper and means operable when said door is closed for shifting said ejector plate from a position adjacent to said transverse wall of said inner hopper to a second position remote therefrom, said last named means comprising a follower secured to said ejector plate, and a stationary cam track secured to said housing in engagement with said follower.

7. A depository comprising a housing having a bag receiving opening, a door pivotally secured to said housing adjacent to the door receiving opening, said door being rotatable about a horizontal axis and being adapted

to close said opening, an outer hopper mounted on the interior of said door, said outer hopper comprising front, rear, and side walls, an inner hopper nested within said outer hopper and including side walls and a transverse wall interconnecting said side walls, shafts for rotatably supporting the side walls of said inner hopper upon the side walls of said outer hopper, a gear mounted upon one of said shafts, a stationary rack mounted upon said housing, said stationary rack being of arcuate configuration and being disposed in engagement with said gear whereby said inner hopper is rotated within said outer hopper in a direction opposite to the direction of movement of said outer hopper, an ejector plate pivotally mounted within said inner hopper and extending between the side walls thereof, a follower member secured to said ejector plate, a side wall of said outer hopper having an opening formed therein for receiving said follower, a cam member including a groove for receiving said follower mounted within said housing, said cam groove being configurated to include an inwardly directed portion engaged by said follower when the hopper door is closed, whereby said ejector plate is pivoted relative to said inner hopper away from the transverse wall thereof.

8. In a depository the combination of a housing having a bag receiving opening, a hopper rotatably mounted within said housing, a movable finger, means mounting the upper end of said finger whereby said finger depends within said housing adjacent to said hopper, said depending finger being disposed to engage bags discharged from said hopper and being configurated to form a plurality of projections adapted to engage a bag to prevent its upward withdrawal from the hopper.

9. In a depository the combination of a housing having a bag receiving opening, a hopper rotatably mounted within said housing, a finger movably mounted within said housing adjacent to said hopper, said finger being disposed to engage bags discharged from said hopper, a locking member, means movably mounting said locking member within said hopper adjacent to said finger, whereby said locking member is shiftable, in response to movement of said finger, into engagement with a wall of said hopper for restraining outward movement thereof.

10. In a depository the combination of a housing having a bag receiving opening, a hopper rotatably mounted within said housing, a finger movably mounted within said housing adjacent to said hopper, said finger being disposed to engage bags discharged from said hopper, a locking member, means mounting said locking member within said hopper adjacent to said finger, whereby said locking member is shiftable in response to movement of said finger into engagement with a wall of said hopper for restraining inward movement thereof.

11. A depository comprising a housing having a bag receiving opening and a discharge opening, an outer hopper pivotally mounted within said housing, an inner hopper rotatably supported within said outer hopper, means for rotating said inner hopper in a direction opposite to the pivotal movement of said outer hopper, said inner and outer hoppers having openings disposed in alignment with the discharge opening when the door is closed, a finger movably mounted within said housing adjacent to the hoppers, said finger being adapted to engage a bag discharge from said hoppers and including a projection adapted to engage a bag for preventing its withdrawal from the depository, said inner and outer hoppers being rotatable relative to said finger whereby a bag restrained by said finger is clamped between said inner and outer hoppers when the depository door is partially opened.

12. A depository comprising a housing having a bag receiving opening and a discharge opening, an outer hopper pivotally mounted within said housing, an inner hopper rotatably supported within said outer hopper, said inner hopper having an arcuate transverse wall, means operable upon pivotal movement of said outer hopper for rotating said inner hopper in a direction opposite to pivotal movement of said outer hopper, said inner and outer hoppers having openings disposed in alignment with the discharge opening when the door is closed, said transverse wall being shifted upon rotation of said inner hopper in close proximity to the wall of said outer hopper, a plurality of fingers pivotally supported by said housing adjacent to said discharge opening, each of said fingers having a plurality of downwardly facing projections adapted to engage a bag discharged from said hoppers and to prevent upward withdrawal of said bag.

13. A depository comprising a housing having a bag receiving opening and a discharge opening, an outer hopper pivotally mounted within said housing, an inner hopper rotatably supported within said outer hopper, means for rotating said inner hopper in a direction opposite to pivotal movement of said outer hopper, said inner and outer hoppers having openings disposed in alignment with the discharge opening when the door is closed, a plurality of fingers pivotally supported by said housing adjacent to said discharge opening, each of said fingers having a plurality of downwardly facing projections adapted to engage a bag discharged from said hoppers and to prevent upward withdrawal of said bag, and a transverse locking bar pivotally mounted to said housing intermediate the upper ends of said fingers and said hoppers, said locking bar being disposed for engagement with said fingers, and being disposed to pivot outwardly in response to pivoting of said fingers, into the path of movement of said outer hopper, said locking member comprising a shoulder adapted to restrain movement of said hopper in one direction and an endwise portion adapted to restrain movement of said hopper in the opposite direction.

14. A depository comprising a housing having an envelope receiving opening, a door pivotally mounted upon said housing and adapted to close said opening, a downwardly inclined stationary runner disposed beneath said envelope opening, a rotatable baffle member pivotally mounted within said housing upon an axis spaced from the pivotal axis of said door and mechanically interconnected with said door for pivotal movement relative to said door, said baffle member including a transverse wall pivoted to a position above said opening when the door is opened and to a position below said opening when the door is closed, said wall moving in close proximity with said runner, whereby said baffle is effective to positively eject envelopes downwardly along said runner.

15. In a depository comprising a housing having an envelope receiving opening, a door pivotally mounted upon said housing and adapted to close said opening, a plurality of laterally spaced downwardly inclined runners disposed beneath said envelope opening, each of said runners including a plurality of downwardly facing teeth, each of said teeth having an undercut lower edge adapted to trap an envelope and prevent its upward withdrawal from said depository, and movable baffle means including a member pivotally mounted upon an axis spaced from the axis of movement of said door, said member being shiftable in response to the opening of said door, said baffle member having portions disposed to pass between said runners and adapted upon opening of said door to wedge an envelope against the undercut portions of said teeth.

16. In a depository comprising a housing having an envelope receiving opening, a door pivotally mounted upon said housing and adapted to close said opening, a plurality of laterally spaced downwardly inclined runners disposed beneath said envelope opening, each of said runners including a plurality of downwardly facing teeth, each of said teeth having an undercut lower edge adapted to trap an envelope and prevent its upward withdrawal from said depository, a pivotally mounted baffle member interconnected with said door, said baffle member being mounted upon an axis spaced from the axis of pivotal

movement of said door, said baffle member including two transverse walls spaced from one another, each of said walls comprising a plurality of depending fingers adapted to pass between said runners, one wall of said baffle member being pivoted to a position above said opening when the door is open, and to a position below said opening when the door is closed.

17. In a depository comprising a housing having an envelope receiving opening, a door pivotally mounted upon said housing and adapted to close said opening, a plurality of laterally spaced downwardly inclined runners disposed beneath said envelope opening, each of said runners including a plurality of downwardly facing teeth, each of said teeth having an undercut lower edge adapted to trap an envelope and prevent its upward withdrawal from said depository, a pivotally mounted baffle member interconnected with said door, said baffle member being pivotally mounted upon an axis spaced from the pivotal axis of said door, said baffle member including two transverse walls spaced from one another, each of said walls comprising a plurality of depending fingers adapted to pass between said runners, one wall of said baffle member being pivoted to a position above said opening when the door is open, and to a position below said opening when the door is closed, and an arcuate guide panel carried by said baffle member between said transverse walls, said guide member, transverse walls and runners defining an envelope receiving chamber when said door is open.

18. In a depository comprising a housing having an envelope receiving opening, a door pivotally mounted

upon said housing and adapted to close said opening, a plurality of laterally spaced downwardly inclined runners disposed beneath said envelope opening, each of said runners including a plurality of downwardly facing teeth, each of said teeth having an undercut lower edge adapted to trap an envelope and prevent its upward withdrawal from said depository, a pivotally mounted baffle member interconnected with said door, said baffle member including two transverse walls spaced from one another, each of said walls comprising a plurality of depending fingers adapted to pass between said runners, one wall of said baffle member being pivoted to a position above said opening when the door is open, and to a position below said opening when the door is closed, and an arcuate guide panel carried by said baffle member between said transverse walls, said guide member, transverse walls and runners defining an envelope receiving chamber when said door is open, and a plurality of arcuate strips mounted upon said housing spaced from said door, said strips being disposed to lie in close proximity to said arcuate guide panel when said baffle is shifted in response to closing of said door.

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