June 16, 1936. M. DORMAN 2,044,672

VENDING MACHINE

Filed March 28, 1935 5 Sheets-Sheet 1

Fig. 1.

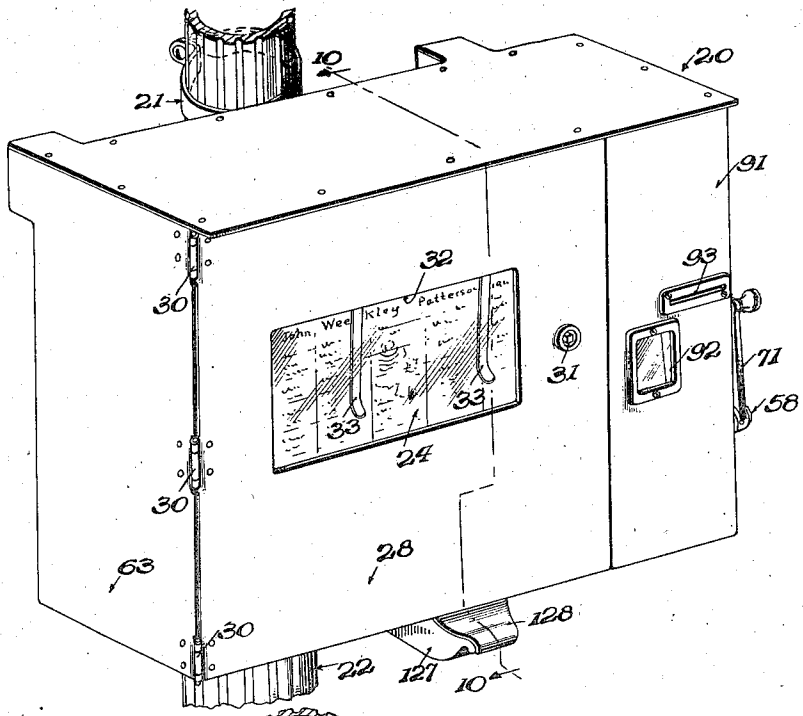
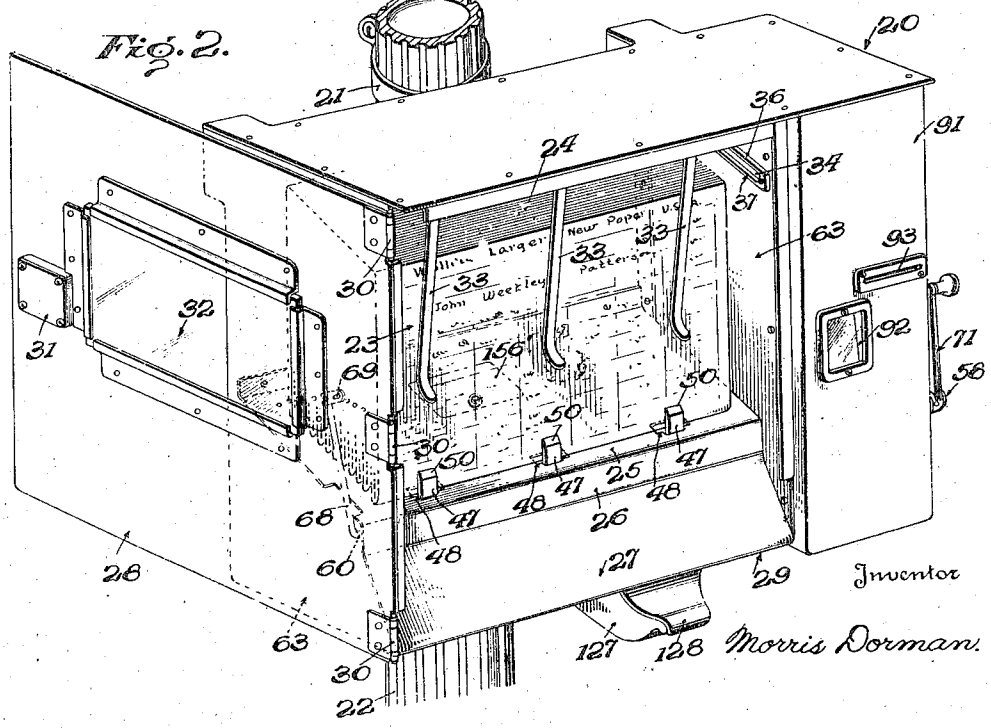


Fig. 2.



Inventor

Morris Dorman.

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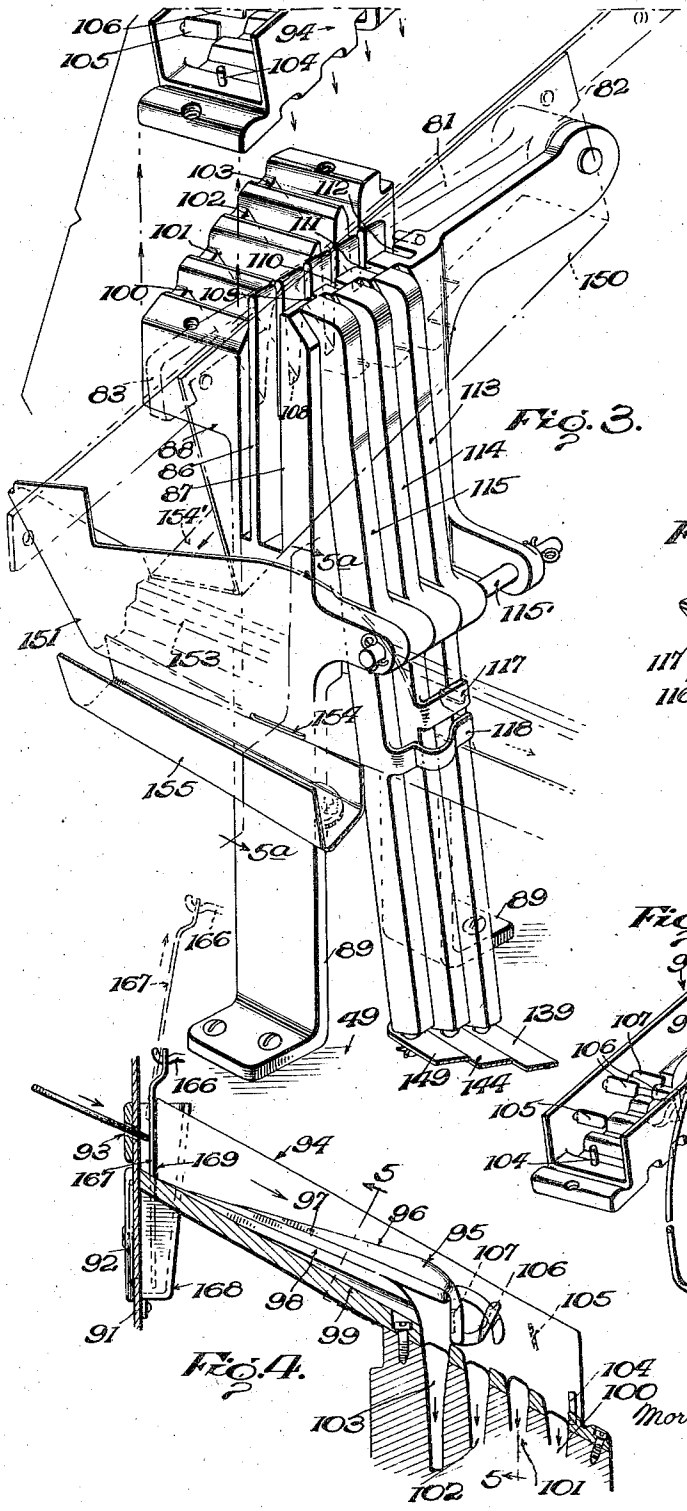


Fig. 3.

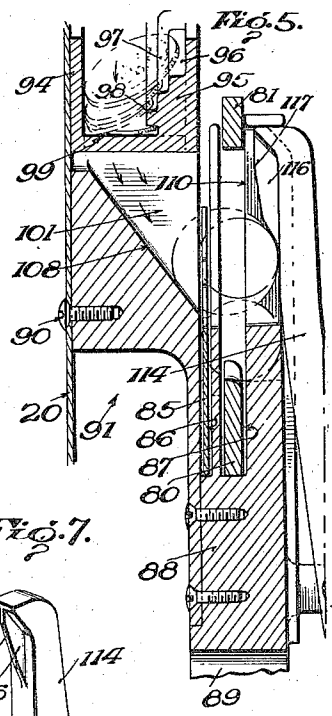


Fig. 5.

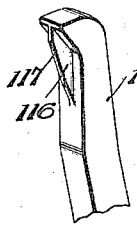


Fig. 7.

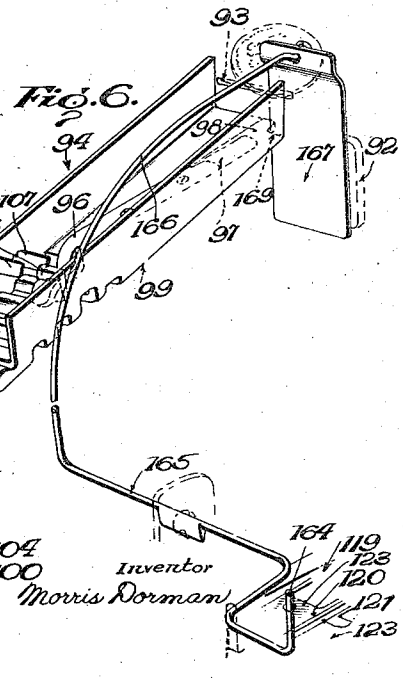


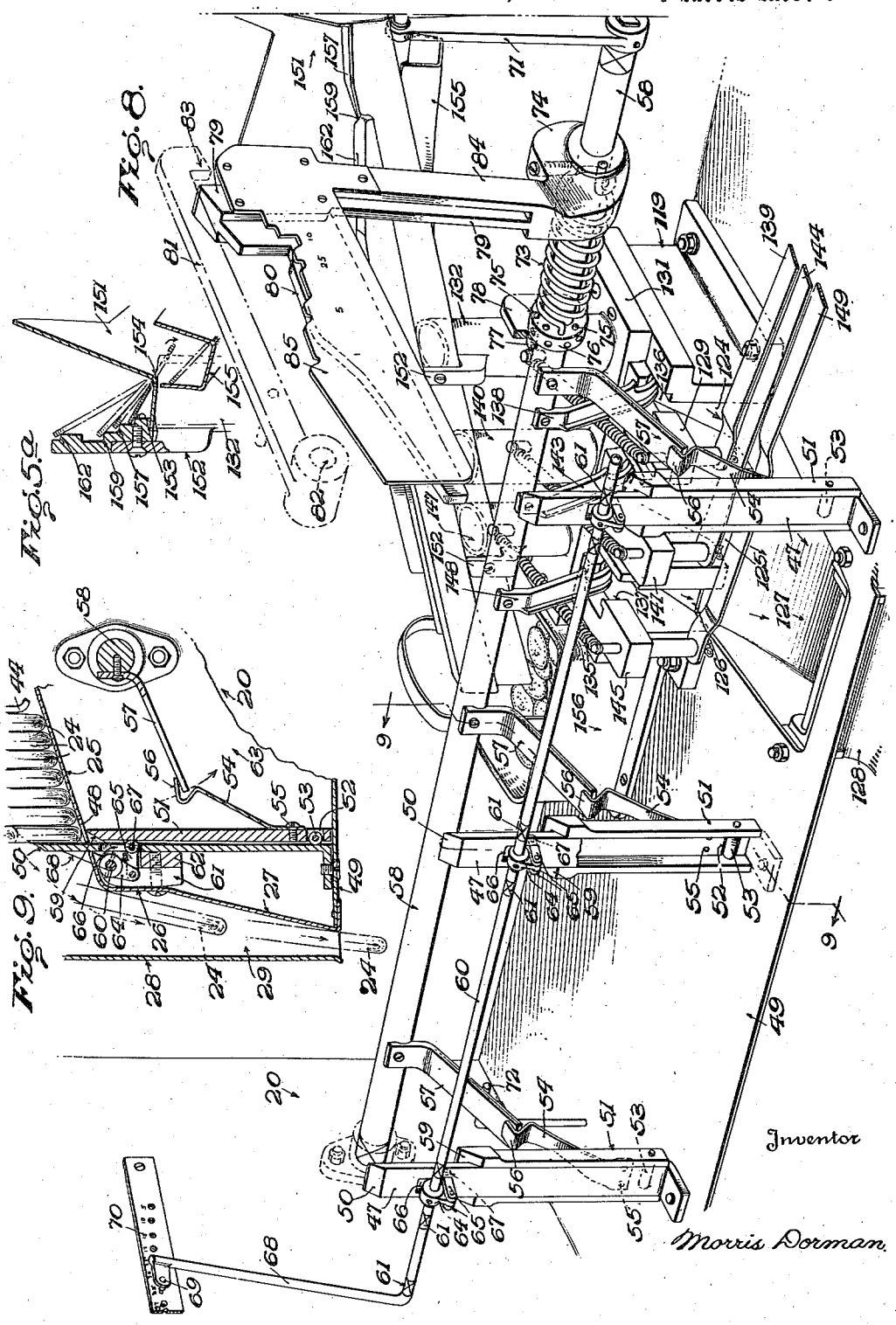
Fig. 6.

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Fig. 10.

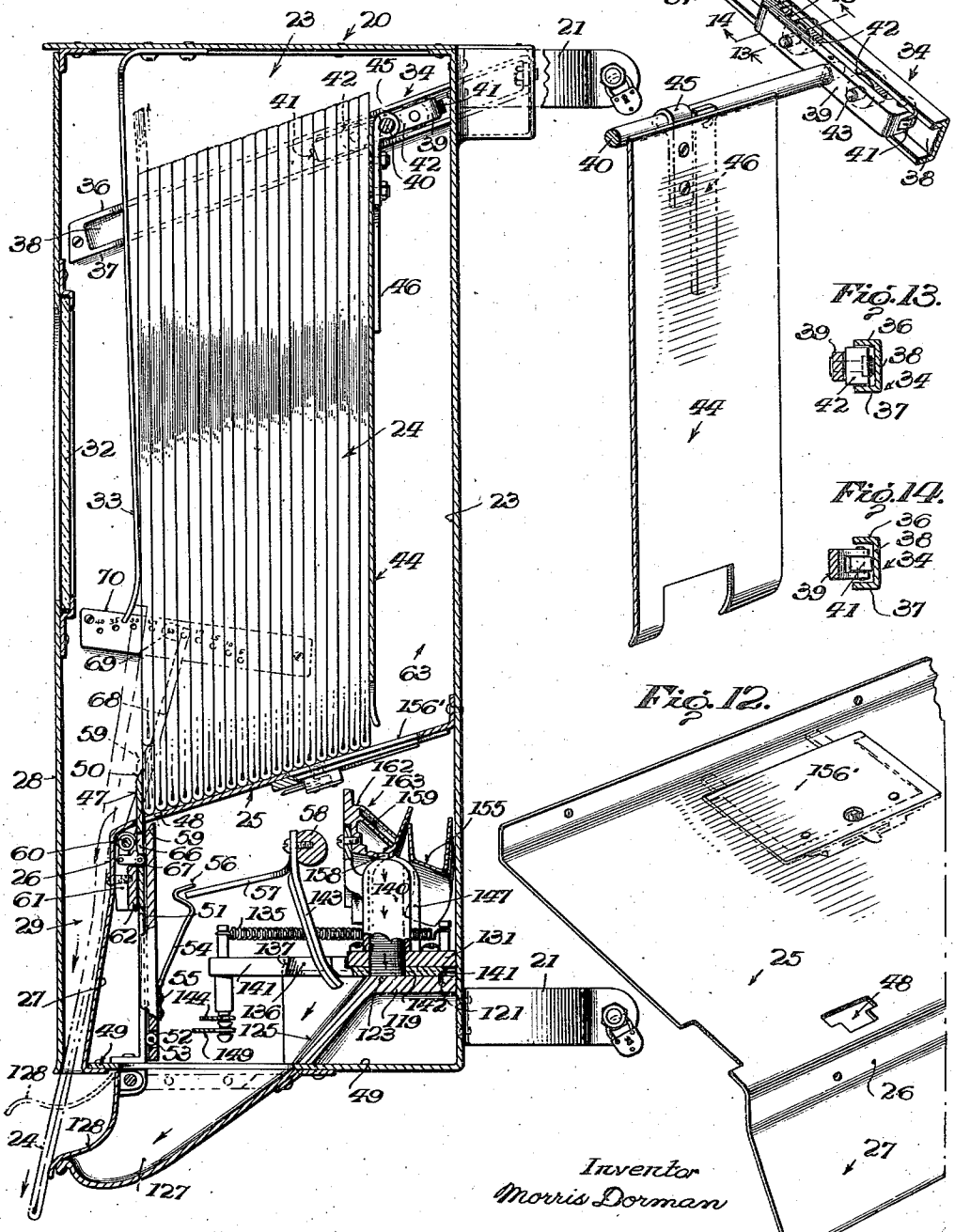


Fig. 11.

Fig. 13.

Fig. 14.

Fig. 12.

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Fig. 15.

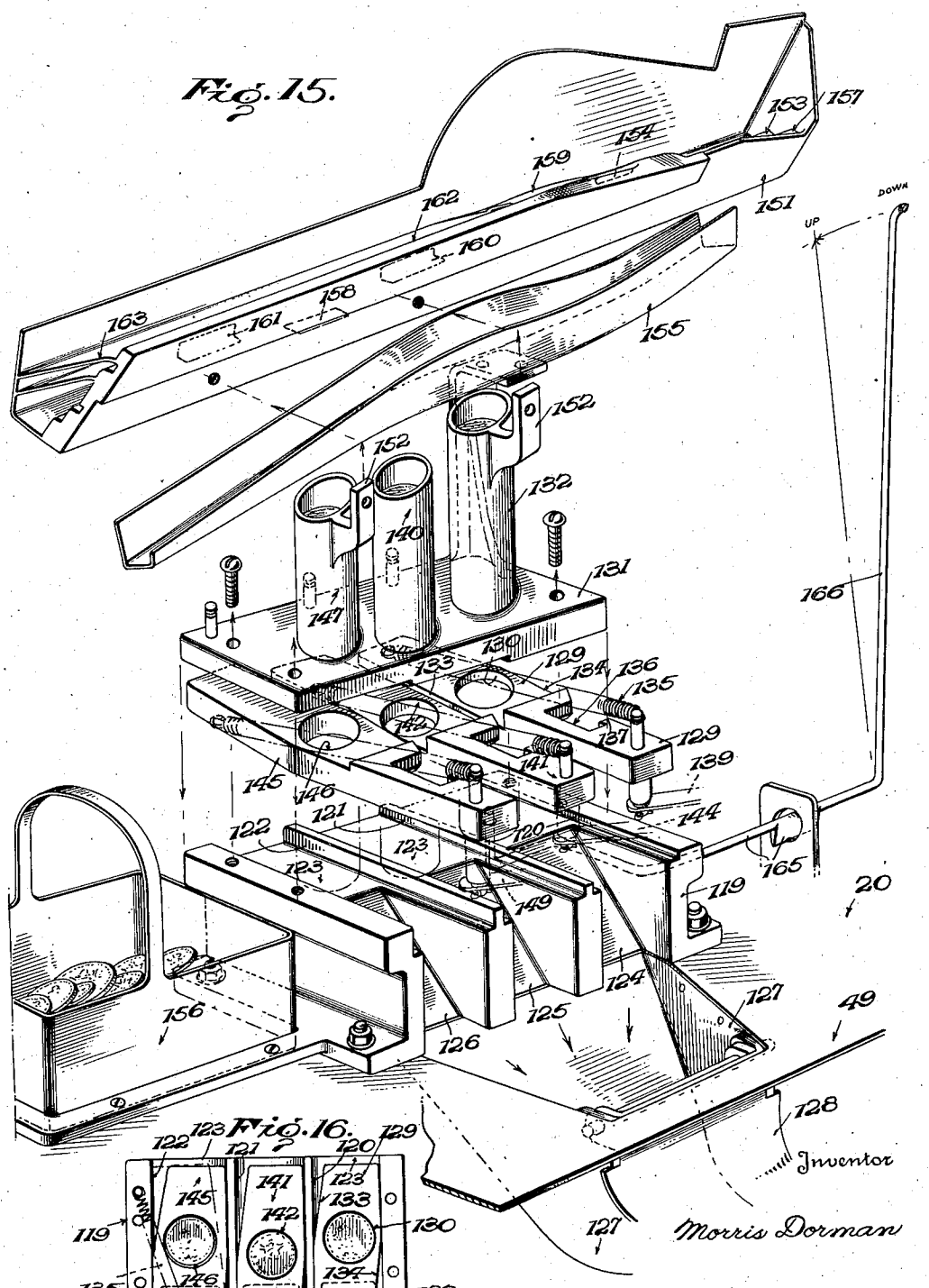


Fig. 16.

Patented June 16, 1936 2,044,672

UNITED STATES PATENT OFFICE

2,044,672

VENDING MACHINE

Morris Dorman, Baltimore, Md.

Application March 28, 1935, Serial No. 13,522

4 Claims. (Cl. 194—63)

My invention relates to vending machines.

An important object of the invention is to provide a machine which will vend an article of a given value upon the insertion of coins of different denominations, and will return the proper change.

A further object of the invention is to provide a machine of the above mentioned character which is well adapted for vending newspapers.

A further object of the invention is to provide a machine of the above mentioned character having adjustable means whereby newspapers of varying thickness will be properly vended.

A further object of the invention is to provide a change making mechanism which is automatic and reliable in operation.

A further object of the invention is to provide means for collecting and distributing the various coins, after they have been employed in releasing the vending means and in actuating the change making mechanism.

A further object of the invention is to provide automatic means to indicate when the coin or coins in the change making mechanism are exhausted to such an extent that proper change cannot be made, and also to prevent the insertion of the coin, of a selected denomination, in the machine.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view of a vending machine embodying my invention,

Figure 2 is a similar view with the front door open,

Figure 3 is a perspective view of the selecting mechanism associated with the change making mechanism,

Figure 4 is a central vertical longitudinal section through the coin entrance chute of the selecting mechanism,

Figure 5 is a somewhat irregular transverse section taken on line 5—5 of Figure 4,

Figure 5a is a transverse section taken on line 5a—5a of Figure 3,

Figure 6 is a perspective view of the coin entrance chute of the selecting mechanism, and associated elements,

Figure 7 is a fragmentary perspective view of one of the levers included in the selecting mechanism,

Figure 8 is a perspective view of the vending mechanism including the ejectors and associated elements,

Figure 9 is a vertical transverse section, somewhat enlarged, showing the ejector and associated elements, taken on the same section line as Figure 10,

Figure 10 is a transverse vertical section taken on line 10—10 of Figure 1,

Figure 11 is a perspective view, parts broken away, of a gravity actuated feed element for the papers,

Figure 12 is a perspective view of a member constituting the inclined bottom of the feed chamber or compartment, parts broken away,

Figure 13 is a transverse section taken on line 13—13 of Figure 11,

Figure 14 is a similar view taken on line 14—14 of Figure 11,

Figure 15 is a perspective view of the coin vending or ejecting mechanism, parts separated for the purpose of clearness, and,

Figure 16 is a plan view of the coin ejectors.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 20 designates a preferably vertically arranged casing, constituting the body portion of the machine. This casing may be supported by any suitable means, and for the purpose of illustration I have shown split clamps 21, attached thereto, which are adapted to be secured to a post or upright 22, as shown. The casing 20 has a paper receiving chamber or compartment 23, within which the newspapers 24, or like articles, to be vended, are arranged. The chamber or compartment 23 has a bottom wall 25, which is transversely inclined and extends downwardly in a forwardly direction, and this bottom wall is continued in a substantially vertical shoulder 26 and vertically inclined extension or apron 27, forming with a front door 28, a discharge passage 29, for the newspapers 24, when vended. The door 28 is hinged to the casing 20, as shown at 30, and is provided with a lock 31, so that this door can only be opened by an authorized person. The door is preferably provided with a window covered by a section of glass 32 or other transparent material, so that the customer may ascertain whether the machine is empty or the like.

The newspapers 24 are arranged vertically on edge within the compartment or chamber 23 with their folded edges lowermost, and these newspapers are supported upon the inclined bottom 25, and slide downwardly upon such bottom. The

leading newspaper 24 rests against stop straps or fingers 33, which are preferably somewhat resilient and are attached to the top of the compartment 23, as shown. Gravity operated follower mechanism is provided to advance the stack of newspapers and retain their vertical arrangement. This follower mechanism includes tracks 34, which are inclined and extend downwardly in a forward direction and are parallel with the inclined bottom 25. These tracks are in the form of channels and have upper and lower flanges 36 and 37 and a vertical wall 38. Coacting with these tracks are carriages 39, having a horizontal rod 40 rigidly secured thereto. The ends of the carriages 39 are preferably forked for receiving rollers 41, pivotally connected therewith to turn upon generally vertical axes, and these rollers engage the side walls 38. Rollers 42 are also secured to the carriages 39, and these rollers have horizontal axes 43 and the rollers 42 travel upon the lower flanges 37, but are preferably slightly spaced from the upper flanges, as more clearly shown in Figure 13. A relatively heavy plate 44 is arranged behind the trailing newspaper to engage therewith and this plate is normally vertically arranged, and is provided at its upper end with knuckles 45, attached thereto, and these knuckles are pivotally mounted upon the rod 40. Arranged at the rear of the plate 44 are tension fingers or straps 46, which are separate from the plate 44, engage therewith and are rigidly attached to the rod 40. It is thus seen that the carriages 39 and plate 44 gravitate downwardly and forwardly as a unit, as the papers are vended, shifting the entire stack of papers forwardly down the inclined bottom 25 and maintaining the vertical arrangement of the stack.

The vending mechanism comprises a plurality of vertically arranged stationary stop bars or stop members 47, which are spaced longitudinally of the inclined bottom 25, and extend through openings 48, formed therein. These stop bars are rigidly attached to the bottom 49 of the casing 20. These stop bars project vertically above the inclined bottom wall 25, for a substantial distance, and their upper ends are inclined or bevelled, as shown at 50. Mounted upon the rear side of each vertical stationary stop bar 47 is a generally vertical reciprocatory ejector 51, which is generally U-shaped in horizontal cross-section, for receiving the stop bar therein. The ejector therefore has sliding engagement upon the stop bar and is positively guided by the stop bar during its vertical movement. Near its lower end, the ejector has an opening or recess 52 formed in its bottom wall, for receiving a roller 53, pivotally connected with the side walls of the ejector, and this roller travels upon the rear face of the stationary stop bar. Each vertically movable ejector 51 has a suitably stiff leaf spring 54 attached to the same, near its lower end, as shown at 55, and this leaf spring is provided at its upper end with a hook portion 56, receiving therein a preferably rigid crank 57, rigidly attached to a rock shaft 58, to be further described. The spring 54 tends to hold the ejector in a vertical position in contact with its stop bar 47 and when the crank 57 is swung upwardly the spring 54 elevates the ejector. As clearly shown in Figure 10, when in the lowermost position, the ejector 51 is beneath the inclined bottom 25 and is adapted to be shifted upwardly through the opening 48 in this bottom, until it assumes an elevated position, with its upper inclined end 59 in alignment with the upper inclined end 50 of the stop bar 47, these inclined ends or faces then constituting one continuous inclined face or deflecting surface to cause the leading newspaper, which is then elevated, to drop into the outlet passage 29.

As is well known the thickness of a newspaper frequently varies on account of the variation in the number of sheets of different editions, and in order that the ejector mechanism will function properly with newspaper of different thicknesses, means are provided to laterally adjust the ejectors, shifting the upper ends thereof rearwardly, if the papers are thicker. This means comprises a horizontal rock shaft 60, journalled in suitable stationary bearings 61, attached to a horizontal bar 62, which is secured to the ends 63 of the compartment 23. Rigidly mounted upon the rock shaft 60, adjacent to each stationary stop bar is a depending crank 64, having links 65, pivoted thereto, and these links may rest upon the bar 62, and operate through notches or openings 66 formed in the stop bar and carry a roller 67 arranged to engage the forward face of the reciprocatory ejector. A lever 68 is rigidly attached to one end of the rock shaft 60 and carries a pointer 69, arranged to operate in proximity to a scale 70, graduated to indicate the thickness of a newspaper, depending upon the number of sheets of the same. This scale is so graduated that the numerals increase forwardly, and when the number of sheets of the newspaper is known, the operator filling the compartment 23 of the machine, adjusts the lever 68 until the pointer is brought adjacent to the corresponding selected number of the scale, and this will laterally shift or adjust the ejector sufficiently, so that the point of its upper inclined face or end 59 will engage the lower edge of the newspaper, at a point slightly rearwardly of its center, whereby the leading paper is elevated, and when it is moved upwardly to clear the inclined end of the stop bar 47, the paper will be vended, as stated. Since the vertically movable ejector is to be laterally adjustable with respect to the width or thickness of the newspapers, its engaging edge will always be upon the rear side of the center of the newspaper and there is no liability of the ejector becoming disposed forwardly of the newspaper, which would prevent the vending of the same. Further, the inclined upper faces or ends of the stop bar and companion ejector serve as one continuous inclined surface, so that the lower edge of the newspaper will slide down the same.

The rock shaft 58 is manually turned clockwise by means of a crank 71, arranged exteriorly of the casing 20. This crank is employed to turn the rock shaft 58 clockwise from the starting position, and the rock shaft is locked or held against turning movement in a counter-clockwise direction from the starting position by one crank 57 engaging over a stationary stop 72. A tortional coil spring 73 surrounds a portion of the rock shaft 58 and has one end thereof attached to a head or collar 74, clamped to the rock shaft, and the opposite end of this spring is adapted for insertion within a selected opening 75, formed upon a tension nut 76, rotatably mounted upon the rock shaft, for adjustment, but normally held against turning movement by means of a screw 77, passing into a selected opening 75, and this screw is carried by a frame portion 78. It is thus seen that the tension nut is normally held stationary, and this enables the tortional spring to return the rock shaft to the normal starting position, when shifted therefrom.

Extending upwardly from the collar 74 is a

normally vertical arm 79, provided near its upper end with a generally horizontal coin shifting bar 80. Arranged near and above the arm 79 is a vertically swinging dog 81 pivoted at 82, and the free end 83 of this dog is arranged in advance of the upper end of the arm 79 and spaced therefrom, as shown, for affording initial loss motion between the elements 79 and 81. The function of the dog 81 coacting with the arm 79, is to prevent the turning movement of the rock shaft to such an extent, for vending the newspaper, without the insertion of the proper coin or coins. A companion generally vertical arm 84 is rigidly attached to the collar 74, and carries a relatively thin coin slicing bar 85 at its upper end, which coin slicing bar is normally generally horizontally arranged. As more clearly shown in Figure 5, the coin shifting bar 80 is positioned directly beneath the dog 81, while the coin slicing bar 85 is disposed to one side of the dog 81. The bars 80 and 81 swing in vertical planes and are positioned within pockets 86 and 87, respectively, formed in a stationary housing 88, included in the selector mechanism. This housing 88 is stationary, and is supported by vertical legs 89, Figure 3, extending downwardly to be bolted to the bottom of the casing 20. The housing 88 is also attached to the end wall of the casing 20, as shown at 90, Figure 5. It might be stated at this point that when a selected coin or coins are positioned above the coin shifting bar 80, and this bar is swung upwardly, such coin or coins will engage beneath the dog 81, swinging it upwardly so that it disengages the end of arm 79, thereby freeing rock shaft 58 for clockwise turning movement.

The casing 20 is provided with a compartment 91, at one end thereof, and this compartment is separate from the newspaper holding compartment, and the compartment 91 receives the elements 80 and 85, and associated element. This compartment may be provided in its front with a window 92, for observation purposes and is provided with a coin slot 93 of sufficient size for receiving coins of different diameters, such as quarters, nickels, dimes and pennies. Arranged within the compartment 91 and leading to the coin slot to receive coins therefrom, is a coin chute 94, Figure 4, and this coin chute is vertically inclined. The coin chute is provided adjacent one side with a step-member 95, having lifts or surfaces 96, 97, and 98, disposed at different elevations and extending downwardly in the order stated. The bottom portion 99 of the coin chute is horizontal in transverse section. The coin slot 93 is horizontally arranged and will deliver the coin in a horizontal position into the coin chute. The lifts 96, 97, and 98, as described, increase in elevation toward their lower ends but are longitudinally inclined. The uppermost lift 96 being disposed the greater distance from the opposite side wall of the chute, will have the quarter travelling over the same, and will gradually tilt the quarter from the horizontal position toward the vertical position as it travels downwardly through the chute. In a similar manner the lift 97 will engage and tilt the nickel, and the lift 98 will engage and tilt the penny, while the dime will pass directly upon the bottom 99 and will not be tilted laterally during its travel through the coin chute. As clearly shown in Figure 4, the numeral 100 designates a dime pocket, which is vertically disposed and adjacent to the lowermost end of the coin chute. Next to the dime pocket 100 is a quarter pocket 101, then a nickel pocket 102, and then a two-penny pocket 103, in the order stated. When the dime enters the coin chute, since it is not tilted laterally it will travel over the pockets 103, 102, and 101, until it strikes a stationary pin or deflector 104, which will cause it to tilt on edge and drop into the pocket 100. The quarter engaging the upper lift 96, is tilted laterally during its downward travel within the coin chute and clears the lower end of the lift and strikes a stationary deflector 105, and then drops into the quarter pocket 101. In a similar manner the nickel travels downwardly in engagement with the intermediate lift 97 and is laterally tilted thereby and disengaging the lower end of this lift, the nickel strikes a stationary deflector 106, and drops into the nickel pocket 102. The penny travelling through the slot is tilted by the lift 98 and upon striking the deflector 10 will drop into the penny pocket. Two pennies are fed into the pocket 103, when the paper sells for two cents. In Figure 5, the quarter pocket 101 is shown, having an inclined bottom wall 108. As shown, the pockets 101, 102, and 103 are correspondingly shaped, but their bottom walls are arranged at different depths or elevations, depending upon the diameter of the coin. The pockets 100 to 103, inclusive, lead into vertical pockets 109, 110, 111, and 112, respectively, the dog 81 being arranged above these pockets 109 to 112, as clearly shown in Figure 5. It is thus seen that when the coin or coins are passed through the slot 93, they will be introduced into the proper pocket in the group 109 to 112, and will be held therein beneath the dog 81.

A selector lever 113 is arranged adjacent to the nickel receiving pocket; a selector lever 114 adjacent to the quarter receiving pocket, and a selector lever 115 adjacent to the dime receiving pocket, there being no selector lever for the two-penny receiving pocket. These selector levers are pivotally supported at a point near their centers by a stationary horizontal pivot element or rod 115'. The selector levers are generally vertically arranged, and swing in vertical planes. The upper end of each selector lever is provided with a fin or projection 116 having a cam surface 117, and this fin projects into the coin reciving pocket in the group 109 to 112, inclusive. When the rock shaft 58 is turned clockwise, the slicer-bar 85 rises and shifts the coin laterally in an outward direction toward the corresponding selector lever and holds the coin against lateral movement in an opposite direction, while the coin is partly elevated by the bar 85. Upon its upward movement, the coin shifts the upper selector lever outwardly and then continues its movements and engages the dog 81 so that it will free the arm 79. Rigidly attached to the selector lever 114 is a finger 117 arranged beneath the pivot 115', and contacting with selector lever 113 but having no connection therewith. The selector lever 115 has a finger 118 rigidly attached thereto and this finger is arranged beneath the pivot 115' and extends to the selector lever 113 to contact with the same. The finger 118 is provided with an intermediate bulge so that it will not actuate the lever 114. The selector lever 113 serves to return three pennies, upon the insertion of a nickel into the machine, and the movement of the selector lever 113 does not move selector levers 114 and 115. When a quarter is inserted into the machine, selector lever 114 is moved, which returns four nickels and the finger 117 carried thereby will actuate selector lever 113 whereby four nickels and three pennies are returned. Selector lever 115 is actuated upon the insertion of a dime and

will return one nickel and the finger 118 carried thereby will actuate the selector lever 113, whereby this nickel and three pennies will be returned.

In Figure 15, is shown change making mechanism, including a body portion 119, having guide ways or passages 120, 121, and 122, horizontally arranged. These passage ways have associated therewith horizontal walls 123, and discharge chutes 124, 125 and 126, to deliver coins to a common receptacle 127, from which they may be conveniently removed by raising a cover 128. Mounted within the passage 120 is an ejector 129, having a pocket 130 for receiving three pennies, the ejector being substantially the thickness of three pennies. The tops of the several passages are closed by a cover 131, rigidly attached to the body portion 119, and this cover carries a vertical tube 132, holding pennies in stacked order, and the pocket 130 is in alignment with the bore of the tube 132 when the ejector is in the normal inner position. The ejector 129 has its opposite longitudinal edges beveled or inclined, at 133 and 134, which permits of a limited turning movement of the ejector within the guide way, the ejector being capable of sliding longitudinally in the guide way. The ejector is shifted longitudinally inwardly by a retractile coil spring 135 attached to the outer end of the ejector, as shown. The ejector is provided in the outer portion with a recess 136, and a shoulder 137. This shoulder is engaged by a shifting crank 138, Figure 8, when the ejector has been shifted laterally by its selector lever, as explained, but if the ejector has not been shifted laterally, the shifting crank will clear the shoulder 137, and the ejector will not be shifted longitudinally and outwardly. When the ejector 129 is shifted longitudinally and outwardly the three pennies within the pocket 130 will discharge into the chute 124 and then into the receptacle 127. The ejector 129, at its outer end, has pivotal connection with the selector lever 113, through the medium of a link 139. The numeral 140 designates a vertical tube for holding nickels and this tube is over the guide way 121. An ejector 141 is mounted to operate within the guide way 121 and is identical with the ejector 129, excepting that the pocket 142 is formed to receive four nickels and the ejector has a thickness corresponding to substantially the combined thickness of four nickels. When the ejector 141 is moved forwardly, four nickels will be discharged into the receptacle 127. The ejector 141 is moved forwardly by the crank 143, rigidly attached to the rock shaft 58, and adapted to engage with the shoulder 137 of ejector 141, when ejector 141 has been shifted laterally. Ejector 141 is shifted laterally by means of a link 144 pivotally connected at its other end and with the lower end of the selector lever 114. An ejector 145 is mounted within the passageway 122 and is identical with the ejector 129, excepting that the ejector 145 has a pocket 146, for receiving one nickel from a vertical nickel-holding tube 147. The ejector 145 is moved forwardly to discharge the nickel within its pocket when an operating crank 148 rigidly secured to the rock shaft 58, engages the shoulder 137 of the ejector 145, the ejector being shifted laterally for this purpose by means of a link 149, pivotally connected with the lower end of the selector lever 115. The coins after elevating the dog 81 are discharged from beneath the dog and are caught in an inclined receptacle 150, which discharges these coins into an inclined assorting and distributing chute 151. The chute 151 is arranged upon the tops of the coin-holding tubes 132, 140, and 147, and are attached to brackets 152. The chute has a rib 153 upon one side thereof to engage the dimes and tilt them so that they will readily pass through a dime slot 154, and be discharged into a chute 155, which will conduct the dimes to a basket 156. Access may be had to this basket by removing door 156'. The chute 151 has a rib 157 at a higher elevation and this rib engages and tilts pennies so that they are conducted to a slot 160 and will feed into the penny receiving tube 132. The chute 151 has a rib 159 of still higher elevation to engage and tilt nickels which will pass through a nickel slot 158 and enter the tube 140 or through a nickel slot 161 and enter the tube 147 if the tube 140 is filled. The chute also has a rib 162 to engage and tilt the quarters which are gradually elevated during their travel through the chute and are finally positioned upon a web 163 and are conducted to the basket 156. As the dimes and quarters will never be returned to the operator of the machine, they are not handled by the machine in making change, and consequently only the nickels and pennies are fed into the coin-holding tubes, for that purpose.

Means are provided to indicate when the machine does not contain a sufficient amount of coins to properly make change, such as when it does not have a sufficient number of pennies. This means comprises a vertical detector 164, which is arranged beneath and centrally of the pocket 130 of the ejector 129. As long as the tube 132 contains pennies, such pennies will depress the detector 164. This will hold the rock shaft 165, see particularly Figures 6 and 15, against turning movement. This rock shaft is pivotally supported to turn on its longitudinal axis and carries a long arm 166, supporting a signal element 167 at its free end. This signal element carries information such as "No Change", and the signal element is visible through the window 92. This signal element operates within a housing 168, and one edge of the signal element is adapted to operate within a notch 169, formed in the chute 94, when the signal element is lowered. The signal element therefore projects into the opening or passage of the slot 93 and will prevent the insertion of the coin therein. The signal element 167 is held elevated above the window 92 as long as the tube 132 contains a nickel or nickels, but when the last coin has been discharged from this tube, the detector 164 is released and the arm 166 and signal element 167 will then move downwardly so that the signal element will be visible through the window and will partly obstruct the passage of the coin-receiving chute.

The operation of the machine is as follows:

With the newspapers arranged within the compartment 23, and the rock shaft 58 being in the normal starting position, as shown in Figure 8, the operator then inserts the coin or coins into the slot 93. If the price of the newspaper is two cents, and the operator has the proper change, he inserts two pennies into the slot 93, and these pennies travel through the coin receiving chute and are finally collected in the penny pocket 103. There is no selector lever corresponding to this penny receiving pocket, as no change is now to be made. These two pennies are arranged in stacked relation, and when the lever or handle 71 is turned forwardly or clockwise, the bar 80 will elevate these coins, due to the space between the end 83 of the dog 81 and the upper end of

the arm 79, and these coins will raise the dog 81 so that it will first release the arm 78, and upon the continued turning movement of the rock shaft 58 clockwise, the cranks 57 will elevate all of the ejectors 51. These ejectors will raise the leading newspaper and when the bottom edge of the newspaper clears the upper bevelled ends of the stationary stop bars 47, the newspaper will discharge through the passage 29 to the operator. The operating cranks carried by the rock shaft 58 do not now shift any of the coin ejectors, as no coin ejector has been shifted by its corresponding selector lever. After the two pennies have thus elevated the dog 81, such pennies are thrown from within the pocket and are caught in the receptacle 150 and enter the distributing chute 151 and are returned to the penny tube 132. When the rock shaft 58 is released, it is returned to the normal starting position by the spring 73, and the dog 81 again locks the rock shaft against turning movement in a clockwise direction. When a nickel is inserted into the slot 93, this nickel is collected in the nickel receiving pocket 102, and when rock shaft 58 is turned clockwise, this nickel engages and elevates the dog 81 to release the arm 79. The slicing bar 85 also acts upon this nickel and shifts it laterally so that it engages the nickel selector lever 113, swinging it upon its pivot. This lever 113 is connected with the ejector 129 for receiving three pennies, and the ejector 129 is accordingly shifted laterally so that its shoulder 137 will be disposed in the path of travel of the corresponding operating crank 138. Upon the further turning movement of the rock shaft 58 in a clockwise direction, the ejector 129 will be moved forwardly and three pennies will be discharged into the receptacle 127 constituting the proper change. The nickel inserted into the machine finally discharges into the chutes 150 and 151 and finds its way to the tube 140 or 147. When a dime is inserted in the machine, this dime is finally received in the pocket 100 and will elevate the dog 81 upon the turning movement of the rock shaft 58, and this dime will also swing the selector lever 115 upon its pivot, whereby the ejector 145, which receives a single nickel, is shifted laterally and will subsequently be moved forwardly. The selector lever 115 also swings the selector lever 113, by virtue of the finger 118, and the ejector 129 will also move forwardly and discharge three pennies with the nickel into the receptacle 127. When a quarter is inserted into the slot, this coin is caught in the pocket 101, and will elevate the dog 81 and swing the lever 114 upon its pivot. The lever 114 is connected with the ejector 161 which receives four nickels and this ejector will be moved forwardly to discharge the four nickels and the movement of the lever 114 will also swing selector lever 113 upon its pivot causing the three penny ejector 129 to move forwardly and discharge three pennies with the four nickels. In the case of dimes and quarters, they are not fed into the coin holding tubes, but pass over them and are passed in the basket 156.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a machine for vending newspapers or the like, means for receiving and holding a plurality of newspapers, manually operated means to discharge the newspapers from the receiving and holding means, lock means to normally hold the manually operated means against movement, a plurality of pockets for receiving coins of different denominations arranged near the lock means, means movable through all of the pockets to engage a coin in any one pocket and cause the coin to actuate the lock means, shearing means operably connected to the manually controlled rockshaft to engage such coins and shift the same laterally, coin selector means arranged near the pockets to be engaged by coins of corresponding denominations and to be actuated thereby when the coin is shifted laterally by the shearing means, and change making mechanism having its operation controlled by the action of the selector levers.

2. In a machine for vending newspapers or the like, means for receiving and holding a plurality of newspapers, manually operated means to discharge the newspapers from the receiving and holding means including a rock shaft, an arm secured to the rock shaft and carrying a coin shifting bar, a pivoted dog having its holding end normally disposed in the path of travel of the arm, a second arm secured to the rock shaft and having a coin shearing bar, means providing a plurality of pockets for receiving coins of different denominations and having the coin shifting bar and the shearing bar shiftable transversely through the same, the coin shifting bar serving to shift a coin into engagement with the dog to move the same to a releasing position and the shearing bar engaging such coin to shift it laterally, selector elements arranged near the corresponding pockets to be moved by the coin when shifted laterally, change making mechanism comprising laterally shiftable and longitudinally movable coin ejectors, means for connecting the coin ejector with corresponding selector elements so that the selected ejector is shifted laterally, and means mounted upon the rock shaft to engage and longitudinally shift the laterally shifted selected coin ejector.

3. In a machine for vending newspapers containing means for holding and ejecting newspapers, an change making mechanism comprising a plurality of laterally shiftable and longitudinally movable coin ejectors, means providing a plurality of pockets for receiving coins of different denominations, locking means to prevent the turning of the paper ejecting means, means for raising a coin in a pocket for releasing the paper ejecting means and causing the coin to fall from the pocket, means to act upon a coin within any pocket and shift the same laterally, selector elements arranged near the corresponding coin receiving pockets to be actuated by the lateral shifting movement of the coins within the pockets, means connecting the selector elements with the corresponding coin ejectors to shift them laterally to selected positions, and means to engage a selected ejector or ejectors to shift them longitudinally.

4. In a machine for vending papers, containing means for holding and ejecting papers, means for locking the said paper ejecting means until a coin is inserted, a change making mechanism comprising a plurality of laterally shiftable and longitudinally movable coin ejectors, means providing a plurality of pockets for receiving coins of different denominations, means to act upon a coin within any pocket and shift the same laterally, selector elements arranged near the corresponding coin receiving pockets to be actuated by

the lateral shifting movement of the coins within the pockets, means for raising coins in the pocket to cause them to fall from the pockets, means connecting the selector elements with the corresponding coin ejectors to shift them laterally to selected positions, means to engage a selected ejector or ejectors to shift them longitudinally, and means carried by certain of the selector levers to cause one of the selector elements to swing with them in one direction.

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