SELECTIVE MERCHANDISE VENDING MACHINE WITH REPLACEABLE MAGAZINE

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This invention relates to merchandise vending machines and more particularly to improvements in vending machines of the type disclosed in the co-pending application of Alva R. Jones entitled "Selective Merchandise Vending Machine," Serial Number 242,480, filed August 18, 1951, now Patent No. 2,696,324, issued December 7, 1954, and assigned to us common assign. Specifi- cally, this invention is directed to improvements in vending machines affording a readily separable and interchangeably replaceable merchandise storage magazine.

In the machine disclosed in the above-mentioned co-pending application, it will be recalled that a rotatable plural-columned merchandise storage magazine was pro- vided as an integral part of the machine. This magazine was mounted and semi-permanently affixed within the machine; the merchandise being dispensed from the preselected storage columns. Although such a construc- tion and arrangement of parts was most effective from a mechanical standpoint, it was found that from a prac- tical viewpoint there existed certain features which were objectionable to the operators or owners of the machines. Specifically, there was objection to the inconvenience resulting from the necessity for servicing or refilling the merchandise storage columns on location.

To appreciate this objection it should be realized that the servicing of the machines on location is ordinarily performed by relatively highly paid skilled personnel. It should further be noted that dispensing machines of the type comprising the subject matter of this invention dispense merchandise in return for coins of small de- nomenclations, such as pennies and nickels. Consequently, the margin of profit to the operators or owners is ex- tremely small. For this reason the time consumed in servicing the machine must be kept to an absolute mini- mum in order to make the machine economically practi- cal. Hence, it was found that the necessity for re- filling the machine on location by highly paid skilled operators reduced the margin of profit in some cases to the vanishing point.

Obviously such a situation could not be remedied by removing and replacing the entire machine during each servicing operation. On the other hand the provision of a machine enabling the restocking of the merchandise on an efficient assembly line basis was the only Spe- cernable solution. Such a method of restocking could only be effected in a location or plant where unskilled labor could be utilized to perform the restocking opera- tion.

It is therefore an important object of this invention to provide a selective merchandise vending machine per- mitting the above-mentioned method of restocking. An object relating thereto is to afford a vending machine having a readily removable merchandise magazine which may be replaced during each servicing operation. Con- sequently, the magazines may be serviced and restocked by unskilled labor working under assembly line condi- tions at a central location or plant and then transported to, and substituted for, the depleted magazines in the machines on location.

Referring once more to the aforementioned co-pending patent application, it will be recalled that in order to effect ejection of the article of merchandise to be dis- pensed from the storage column of the magazine, it was necessary that the merchandise in the column be directly exposed to at least certain parts of the ejecting mechanism. The ejecting mechanism was positioned in, and an integral part of, the machine itself. Of course, in order to provide a separable magazine which would retain therein the undispensed portion of the merchan- dice, it became necessary to redesign not only portions of the original magazine construction but also certain features of the dispensing mechanism.

It is therefore another important object of this inven- tion to provide a dispensing mechanism of a design capable of effecting positive ejection from a separable merchandise storage magazine.

A further object is to afford a separable plural-columned magazine having means for supporting and re- taining therein the merchandise contents even when the magazine is removed from the machine.

Yet another object is to provide cooperating means in the machine and in the magazine for expediting and simplifying the assembly in operational position of the replaced magazine with the machine.

Yet a further object is to afford a replaceable mer- chandise magazine of simplified construction in which heretofore essential parts may be entirely eliminated.

Still another object is to provide a replaceable mer- chandise magazine in which the primary ejecting ele- ments are directly associated therewith insuring more positive dispensing action. An object relating thereto is to afford such a construction whereby the ejecting mechanism may be tested as a part of the magazine, thereby eliminating the necessity for pre-assembling the magazine with the machine.

Still another object is to provide simple but effective means for removing the magazine from the machine, said means also functioning as a carrying handle for the magazine.

Another object is to afford auxiliary means in the machine whereby even that portion of the merchandise not directly exposed to open view may be viewed by the prospective purchaser.

Finally another object is to provide a selective mer- chandise vending machine with a replaceable magazine, the manufacture and assembly of which is considerably simplified by such construction resulting in substantial economies in the cost of the machine.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel features of construction, ar- rangement and a combination of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

For the purpose of facilitating an understanding of our invention, we have illustrated in the accompanying draw- ings a preferred embodiment thereof, from an inspection of which, when considered in connection with the follow- ing description, our invention, its mode of construction, assembly and operation, and many of its advantages should be readily understood and appreciated.

Referring to the drawings in which the same characters of reference are employed to indicate corresponding or similar parts throughout the several figures of the drawings:
Fig. 1 is a side elevational view of our selective merchandise vending machine embodying the various features of our invention and with portions of the housing broken away to reveal in section certain constructional details of the invention;

Fig. 2 is a view in perspective of the pedestal member of the invention together with a lower portion of the magazine member and with a portion of the magazine housing broken away to reveal certain details of the magazine itself;

Fig. 3 is a sectional view in elevation of the mounting plate member of the machine and of the lower portion of the magazine immediately prior to its assembly in the machine;

Fig. 4 is a fragmentary bottom plan view of the magazine taken on the plane of line 4—4 in Fig. 3 of the drawings and viewed in the direction indicated;

Fig. 5 is a fragmentary top plan view of the mounting plate member as taken on the plane of line 5—5 in Fig. 3 of the drawings and viewed in the direction indicated;

Fig. 6 is a longitudinal sectional view illustrating in enlarged detail some of the features of construction of the mounting plate and ejecting mechanism revealed in Fig. 4 of the drawings;

Fig. 7 is a fragmentary sectional view illustrating certain details of construction and the manner in which some of the parts cooperate in the operation of the machine;

Fig. 8 is an enlarged fragmentary top plan view of the magazine illustrating certain constructional details;

Fig. 9 is a sectional view taken on the plane of line 9—9 in Fig. 1 of the drawings and viewed in the direction indicated;

Fig. 10 is a fragmentary sectional view taken on the plane of line 10—10 in Fig. 8 of the drawings and illustrating certain details of construction of the magazine.

Referring now to the several figures of the drawings, reference numeral 12 indicates generally the vending machine embodying the principles of our invention. The machine 12 comprises a number of separable housing members including a pedestal base designated generally by reference numeral 14 and comprising a threaded, closed-bottom case with substantially vertical walls 16, 18, and 20 closed by a door assembly 22. The door assembly 22 is pivotally connected by means of a hinge 24 positioned at the top of a short bottom wall 26. To the front of the door 22 may be affixed an actuating knob 28, a coin slot 30, a merchandise chute delivery opening 34, and an ejecting mechanism 36. The door is further formed with a depressed central area 36 within which is positioned an inclined opening 38 which may be closed by a transparent member or window 40. The function of this window will be disclosed as the description proceeds.

Directing attention now to Fig. 2 of the drawings, it will be noted that within the pedestal case 14 may be affixed a mounting plate 42 positioned in a horizontal plane and spaced below the top edges of the casing walls as illustrated in Figs. 1 and 2 of the drawings. The mounting plate 42 may be removably mounted within the case 14 by any conventional method such as the plurality of L-shaped brackets 44 affixed to the inside of the pedestal walls and affording horizontal legs such as 46. The horizontal legs support the mounting plate 42 and may be removably affixed thereto as by bolts 48.

The plate 42 itself may be formed with a pair of protruding concentric ridges 50 and 52 and with a central aperture 54.

Within the central aperture 54 may be positioned and affixed a bayonet-pointed magazine magazine pin post 56, the function of which will become apparent as the description unfolds. This post may be permanently affixed within the aperture 54 by any suitable means but as disclosed in Figs. 1, 3, and 6 of the drawings, it is affixed by means of a rivet 58.

Spaced equidistantly about the central pivot pin 56 may be a plurality of pointed locating pins such as 60 which in the embodiment chosen for illustration, as in Fig. 3 of the drawings, are three in number. The function of these locating pins will also become apparent as the description proceeds.

Completing the description of the mounting plate 42, it will be noted in Figs. 5 and 9 of the drawings that the plate may be further formed with an offset-slightly depressed front portion 62 affording a recessed, guide plate for an ejector plate 64 which will be subsequently described. The offset-recessed plate 62 may be formed with an elongated longitudinal slot 66 formed centrally therein at the bottom of an encircling depression 68, said depression terminating in a horizontal flange 70 likewise encircling the central slot 66. It will be noted that the leading edge 72 of the guide plate 62 extends somewhat beyond the leading edge of the mounting plate itself and it will further be noted that at the rear of the guide plate 62, a portion of the plate is cut out as at 74 to afford a central arcsate detent 76. Again the function of these constructional features will become apparent as the description proceeds.

Although in the embodiment chosen for illustration, the guide plate 62 has been described as integrally formed by offset stampings from the plate 42, it should be apparent that an equivalent structure could be afforded by cutting out a suitable portion and welding within said cutout a separate guide plate.

Slidably mounted within the slot 66 is an ejector operating pin 78. This pin 78 may be formed with an upwardly protruding pointed shaft 80 of reduced cross-section and a washer-like flange portion 82 adapted to rest on the marginal flange 70. Below the flange 82 the pin may be formed with an enlarged cross-sectional shaft portion 84 terminating in a head 86. Once more the function and operation of this ejector operating pin 78 must await the subsequent description of other parts of the machine.

The ejector actuating mechanism utilized in this machine is similar to the ejector actuating mechanism which has been described in some detail in the aforementioned co-pending patent application. This mechanism designated generally by reference numeral 88 is adapted to be controlled by a coin mechanism (not shown) as actuated by the knob 28. The knob 28 is mounted on the outer end of a shaft 90 journalled through the door 22, the inner end of which is provided with a cross-pin 92 adapted to cooperate with a bifurcated yoke 94 rigidly mounted on the outer end of the cam shaft 96. Thus the two shafts 90 and 96 are readily operationally joined together by merely closing the door so that the bayonet points of the pin 92 are seated in the bifurcations of the yoke 94. The shaft 96 may be rotatably supported by a pair of depending arms 97 and 99 of a mounting bracket 101. To assist in aligning the yoke 94 in proper position preparatory to enganging the pin 92, a flange member 98 may be provided on the yoke 94.

The rotative movement imparted to the shaft 96 by the actuating knob 28 is transmitted to the ejector slide plate 64 by means of a wobble-plate cam 100 suitably mounted on, and affixed to, the shaft 96. The wobble-plate cam 100 is positioned beneath an operating lever 102 pivotally mounted at one end, as at 103, below the mounting plate 42. The other end is free but bifurcated to afford a pair of arms separated by a slot 104 within which may be slidably positioned the shaft portion 84 of the ejector operating pin 78. Suitable washers such as 106 may be interposed about the shaft 84 above and below the operating lever 102 if desired.

The lever 102 is actuated by the cam 100 by means of captured motion of the marginal edge of the cam as it bears against one or the other of a pair of pointed auxiliary mounting pins 108 and 110 spaced apart a distance to accommodate therebetwixt the marginal edge of the wobble-plate cam 100 as it is rotated therewith. As was disclosed in the aforementioned co-pending patent application, as the
Cam is rotated to describe an elliptical path, the motion is translated to the ejector plate 64 which is thereby reciprocated in a lateral plane by virtue of cooperating structures which will now be described in greater detail.

As was described hereinabove, the operating lever 102 engages the ejecting operating pin 76 reciprocating the same back and forth within the slot 66. This motion is communicated to the ejector slide plate 64 when the pointed upwardly protruding shaft portion of the operating pin 76 is seated within a complementary opening 112 formed in the ejector plate 64. This plate may be substantially rectangular in shape and is slidably mounted within a cutout portion 114 of a drum plate 116 which in turn is pivotally mounted as at 118 beneath a merchandise magazine indicated generally by reference numeral 120. Both the drum plate 116 and the magazine 120 will be subsequently described in detail.

Returning now to the description of the ejector slide plate 64, it will be noted in Fig. 4 of the drawings that the same may be provided with a transverse reinforcing rib 122 affixed to the bottom of the ejector plate 64 and having the opening 112 formed therethrough. The rear portion of both the plate 64 and the reinforcing plate 122 may be shaped with a plurality of tongues such as 128 which are adapted to being slidably positioned below the depressed marginal edges 130 of the cutout portion 114. Thus the tongues 128 cooperate with the marginal edges 132 of the ejector slide 64 positioned above the marginal edges 136 of the cutout portion 114 of the drum plate 116, in forming a sliding relationship the ejector slide plate 64 within the cutout portion 114.

The ejector slide plate 64 is further formed with a transverse slot 134 positioned medially therein. This slot 134 may be formed with its leading edge 136 in a straight plane and with its trailing edge 138 arcuate curved as shown in Fig. 4 of the drawings. The portions of the ejector plate 64 adjacent the ends of the slot may be stamped and bent downwardly in inclined planes as at 139 and 142 thereby providing bevelled or inclined surfaces communicating between the top surface of the ejector plate 64 and the slot 134. The function of the slot and the bevelled or inclined surfaces will be revealed in subsequent description. Although a specific type of ejector mechanism has here been described, it should be obvious that other types of such mechanisms may be substituted therefor including the usual rotating type, without departing from the spirit and scope of the invention.

Directing attention now to an important member of the machine, the magazine 120 is of the same general construction as the magazine disclosed in the above-mentioned co-pending patent application but modified in certain respects for the purpose of making the same separable from the machine. Essentially, the machine comprises a drum formed with a central cylinder 144 within which suitable bushings such as 146 and 148 are provided respectively at the bottom and top thereof for the purpose of receiving the bottom magazine pivot post 56 and a similar pointed top pivot post 150 carried by the cover member 152 of the machine. To the top of the cylinder 144 is suitably affixed a top closure member 154. To the bottom of the cylinder 144 is suitably affixed a similar bottom closure member 156.

Both the top and bottom closure members 154 and 156 are formed with a plurality of depending or upstanding flanges such as 158 and 160 respectively, to each of which may be attached a merchandise storage column such as 162. Screws or bolts such as 164 may be used as a means for removably affixing these columns to the flanges 158 and 160 to form the drum-shaped magazine illustrated in the drawings. These columns, as in the previously described co-pending patent application, are rectangular in cross-section as defined by a back wall 166, side members such as 168, and generally formed narrow front wall segments such as 170. The front wall segments 170 are separated by a space 172 affording frontal access to the merchandise chamber 163 within which the articles of merchandise M may be stored.

As in the aforementioned co-pending application, the side walls 168 of the merchandise columns may be formed with vertically aligned rows of annular openings such as 174 designed to accommodate therein an angular edge 176 of a locking member 178 which in turn is affixed to a self-locking follow-up weight 180. The weight 180 is formed with a central bottom portion stamped and bent downwardly to afford a detent or depending finger 182. This depending finger 182 is adapted to cooperate with the ejector plate slot 134 for the purpose of locking the same against reciprocation when the merchandise M has been exhausted in the column selected for dispensing. The inclined end portions 140 and 142 permit the detent to ride up and out of the slots when the magazine is rotated. Thus, although the dispensing of the merchandise is prevented when an empty column has been selected, the selection of another column is not prevented by this construction.

To the bottom of the closure member 156 may be affixed as by riveting or welding a spider structure 184 similar to that disclosed in the aforementioned co-pending patent application and serving the same function in the selection of the merchandise column from which the merchandise is to be dispensed.

As was stated in the objects of this application, in order to achieve the primary objective of making the magazine separable from the vending machine, it is necessary to provide some means for retaining the merchandise within the columns of the magazine when the magazine is removed from the machine, that is to prevent the merchandise from falling out of the open bottom of the columns. On the other hand it is also essential that there be direct communication between the ejecting mechanism and the merchandise at the bottom of the column. To achieve this, a novel structure comprising the rotatable drum plate 116 has been devised.

The aforementioned drum plate 116 is circular in shape and is of a diameter at least as great as the diameter of the magazine 120 as measured from the outer front walls 170 of the magazine columns. Thus the drum plate serves as a bottom closure for the merchandise columns 163 of the magazine. Since the drum plate 116 is affixed to the bottom of the magazine and forms an integral part thereof, the bottom of the columns are closed thereby at all times but with one significant exception. This exception is the front cutout portion 114 within which is mounted the ejector slide plate 64. By virtue of the fact that the magazine is rotatable with respect to the drum plate 116, this opening or cutout portion 114 may be rotated selectively to position the same beneath any one of the columns 163 as desired.

In selecting the column, the magazine 120 is rotated with respect to the drum plate by means of the selector cover 152. Hence, it should be obvious that in associating the magazine with the machine, means must be provided to locate and lock the drum plate in a non-rotatable position and with the ejector slide plate 64 associated with the ejector actuating mechanism 128. For this purpose the drum plate may be formed with a plurality of annular openings such as 186 positioned for seating therein the locating pins 69 provided in the mounting plate 42. When so seated, it will be apparent that the drum plate 116 is locked in immovable position so that only the drum may be rotated about its pivot points 56 and 150.

It will be noted that when the drum plate is so locked
in position, the ejector slide plate 64 is positioned at the front of the magazine within the space afforded by the depressed guide plate 62. To operationally connect the ejector plate with the actuating mechanism, all that need be done is to seat the ejector operating pin 78 within the complementary opening 115 formed through the ejecting plate 64 and the reinforcing plate 122. Conversely to break the connection all that is required is the mere raising of the magazine.

For the purpose of more readily enabling the raising of the magazine, a handle 188 may be provided positioned at the top of the magazine. This handle 188 may be formed of a material sufficient to permit in suitable shape to enable the handle to be folded down for resting on the top closure member 154 when not in use. It may be affixed to the top closure member in movable relationship by means of diametrically opposed openings such as 190 and 192 formed in the top plate 154. Through these openings the ends of the bale or handle 188 may be inserted first horizontally as at 194 in a plane at right angles to that of the upright portion 196 of the handle and then outwardly in a horizontal plane as shown at 198. The diameter of the openings 190 and 192 being considerably greater than that of the wire of the handle 188, the handle is readily maneuvered so that the rim 194 clears the rim of the opening 190 and 192 permitting the same to be folded down upon the top closure member 154 of the magazine.

When it is desired to remove the magazine from the machine, the handle is swung upwardly to its operational position affording means by which the magazine may be lifted out of engagement with the lower pivot point 56, the positioning pins 60, and the ejector operating pin 78. Thereafter the handle may serve as means for carrying or transporting the magazine.

In Fig. 1 and 2 there is illustrated a magazine housing 200 enclosing the magazine 128. This housing may be transparent as disclosed in the above-mentioned co-operating application and is provided at the bottom thereof with an adaptor ring 202 designed to join the magazine housing 200 to the pedestal housing 14. Since this adaptor housing 202 is non-transparent, as is the pedestal housing 14, it is apparent, as will be noted in Fig. 1 of the drawings, that the lower portion of the columns of merchandise in the magazine are hidden from the view of the customer. Thus, in many cases, the purchaser is under the impression that those columns in which the merchandise has been depleted to a point where the top of the stack of merchandise is below the adaptor ring 202, are empty, and hence no attempt is made to select those columns for dispensing. To remedy the situation, the window structure previously described, including the transparent member 40, has been provided in the door 22. Thus, the lower portion of the magazine columns may be viewed through this window 40, the window pane itself being retained within a framework such as 204 as shown in Fig. 1 of the drawings.

With the exception of the separable magazine feature of the machine, the assembly and loading of the machine is so similar to the same operations as disclosed in the aforementioned co-operating application that a description of these operations need not be repeated here. So also the operation of the machine itself for dispensing purposes has been adequately described in the aforementioned co-operating application. In view thereof it would be repetitious to describe the operations in detail. Suffice it, then, merely to describe generally the operation in which, after the machine has been assembled in accordance with the method described hereinabove, the selecting cover 152 is grasped by the purchaser and rotated until the desired column is aligned over the ejector slide plate 64. The coin is then inserted and the actuating knob 28 rotated. This sets in motion the actuating actuating mechanism 88 including the wobble-plate cam 100 which in turn actuates the lever 102 resulting in the reciprocation of the ejector slide plate 64.

As the ejector slide plate is moved back behind the merchandise M in the columns, the lowest article of merchandise drops down into the vacated area within the recessed plate 62 and in front of the leading edge of the ejector slide plate. Continued turning of the knob in completion of the reciprocating movement of the ejector slide plate and the consequent forward movement of said plate. The lowermost article of merchandise is thereby pushed forward, as shown in Fig. 4 of the drawings, into the merchandise delivery chute and until it slides down and is delivered through the delivery opening 32 in the front door 22.

From the foregoing description it should be apparent that we have provided a selective merchandise vending machine in which a separable merchandise magazine is afforded. This separable feature enables the machine to be serviced by restocking in a most economical and efficient manner, namely on an assembly line basis in a central enclosure rather than manually and individually at each machine location. We have further so designed the machine that operational connection between the mechanisms of the machine and the magazine may be made and broken without any but the simplest of assembling operations; the assembly operation consisting merely of aligning cooperating members of the machine with corresponding members in the machine and then lowering the magazine into position. Conversely, disassembling of the magazine from the machine is accomplished by merely lifting the magazine out of the machine. We have further provided means for viewing the lower portion of the magazine which hitherto was hidden from view in the machine comprising the subject matter of the previously mentioned co-operating application. Finally we have provided novel handle means for readily lifting the magazine from the machine, said means also serving as carrying or transporting means.

It is believed that our invention, its mode of construction and assembly, and many of its advantages should be readily understood from the foregoing without further description, and it should also be manifest that while a preferred embodiment of the invention has been shown and described for illustrative purposes, the structural details are nevertheless capable of wide variation within the purview of our invention as defined in the appended claims.

What we claim and desire to secure by Letters Patent of the United States is:

1. A selective merchandise vending machine comprising a pedestal, a mounting plate positioned in said pedestal, and a removable merchandise storage magazine having a plurality of columns rotatably supported on said mounting plate; a drum plate rotatably secured to said magazine for normally closing the bottom openings of said columns, ejecting means positioned on said drum plate, actuating means mounted on said pedestal, means for readily positioning said drum plate on said mounting plate in operational position and means for readily connecting said actuating means with said ejecting means upon the mere locating and lowering of the drum plate into operational position on said mounting plate, said mounting plate having means for locking said drum plate in non-rotatable relationship therewith, and said actuating means enabling merchandise to be dispensed from any pre-selected column of said magazine to locate said column thereon.

2. The selective merchandise vending machine of claim 1 in which said ejecting means comprises an ejector slide plate mounted on said drum plate, said ejector slide plate being reciprocable in a radius path of said drum plate.

3. The selective merchandise vending machine of claim 2 in which said third mentioned means comprises a central pivot pin positioned on said mounting plate and adapted to cooperate with a pivot-bearing member in said mer-
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chandise magazine, said fifth mentioned means comprises a plurality of locating pins mounted on said mounting plate and adapted to cooperate with complementary openings formed in said drum plate, and said fourth mentioned means comprises an ejector operating pin mounted on a movable arm of said actuating means, said ejector slide plate formed with an opening and said opening adapted to accommodate therein the free end of said ejector operating pin whereby said ejecting means is operatively connected to the actuating means.

4. The vending machine of claim 2 in which said drum plate is formed with a radially extending cut-out portion and said ejector plate is slidably mounted within said cut-out portion.

5. The vending machine of claim 4 in which said mounting plate is horizontally positioned in said pedestal, said third mentioned means comprising a central upwardly protruding pivot pin positioned on said mounting plate and said fifth mentioned means comprising a plurality of locating pins positioned radially in spaced relationship about said pivot pin, said pins cooperating with complementary openings formed in said drum plate to locate and operationally connect the magazine to the machine.

6. The vending machine of claim 5 in which a transparent magazine housing is mounted on said pedestal, said pedestal having a front door closure member, said door having a window mounted in an inclined plane so that the lower portion of the magazine positioned within the pedestal may be viewed therethrough.

7. The vending machine of claim 5 in which said fourth mentioned means comprises said mounting plate formed with an off-set radially extending ejector-plate recess and guide portion, said recess and guide portion formed with an elongated central slot and an ejector-operating-pin slidably mounted within said slot.

8. The vending machine of claim 7 in which said ejector plate is formed with an opening therethrough adapted to receive the upwardly protruding shaft of said ejector-operating-pin to operationally connect said ejector plate to said actuating means.

9. The vending machine of claim 1 in which a lifting and carrying handle is affixed to the top of said magazine, said handle movable about a horizontal axis in an arc of substantially ninety degrees from the plane of the top of said magazine.

10. The vending machine of claim 2 in which said fourth mentioned means comprises an upstanding ejector-operating-pin slidably mounted in said mounting plate and said ejector plate formed with an opening within which said ejector-operating-pin may be removedly seated, said ejector-operating-pin being operationally connected to the actuating means.

11. The vending machine of claim 2 in which said mounting plate is formed with a plurality of spaced concentric ridges, said third mentioned means comprising a central upwardly protruding pointed pivot pin and said fifth means comprises a plurality of upwardly protruding locating pins positioned radially in spaced relationship about said central pivot pin, said ejector plate slidably mounted in said drum plate pivoting mounted below said magazine, said drum plate having a central pivot bushing and a plurality of complementary openings for seating said locating pins therein.

12. In a separable plural-columned magazine for selective merchandise vending machines of the character described; a central cylinder having top and bottom closure members affixed thereto, the marginal edges of said closure members flanged downwardly and upwardly respectively, a plurality of rectangular-shaped open-front merchandise storage columns affixed to aligned top and bottom pairs of said closure member flanges surrounding said cylinder; pivot bushings provided centrally in said top and bottom closure members, a drum plate pivotally mounted below said bottom closure member, a radial portion of said drum plate cutout with depressed marginal edges formed on both sides of said cutout portion, an ejector-slide-plate mounted in reciprocable relationship in said cutout portion, said slide plate having a transverse slot with inclined end surfaces formed therein, said slide plate further formed with an ejector-operating-pin aperture therein, said top closure member formed with a pair of diametrically opposed openings therein, and a wire handle mounted with its bent ends inserted one in each of said openings and retained therein by means of said bent ends, said handle movable from an upright position to a horizontal position.

13. In a selective merchandising vending machine of the character described including a pedestal closed by a front door and having a separable rotatable magazine with a drum plate rotatably affixed to the bottom thereof positioned therein; a mounting plate mounted in a horizontal plane in the pedestal and spaced from the top thereof, said mounting plate formed with a pair of spaced concentric ridges, a pointed pivot pin centrally mounted in said mounting plate, three pointed locating pins mounted medially in spaced relationship one with the other in said mounting plate, said mounting plate formed with a front radial off-set depressed portion, said off-set depressed portion formed with a central radial elongated slot defined by a further depressed horizontal marginal flange and a pointed ejector-operating-pin slidably mounted in said slot, said locating pins adapted to cooperate with three openings in said drum plate for locking said drum plate in non-rotatable position, said ejector-operating-pin adapted to cooperate with ejecting means positioned on said drum plate, and said pivot pin affording a pivot point so that said magazine is readily rotatable.

14. In a selective merchandising vending machine of the character described; the sub-combination of a mounting plate having locating pins protruding upwardly therefrom, an ejector-operating-pin slidably mounted in said plate and reciprocable in a radial path, and a self-contained merchandising magazine removable and rotatably mounted on said mounting plate, said magazine comprising a drum with a plurality of vertical merchandise storage columns removably affixed about the circumference of said drum, a drum plate rotatably affixed to the bottom of said drum, said drum plate formed with complementary openings for seating therein said locating pins, and an ejector-slide-plate reciprocable in a radial path by means of said ejector-operating-pin.

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