March 10, 1959 J. J. CATALANO ET AL 2,876,835

STAMP DISPENSING MACHINE HAVING SELECTIVELY POSITIONABLE CUTTERS OPERABLE TO SEVER A PREDETERMINED NUMBER OF STAMPS

Filed Aug. 27, 1956

5 Sheets-Sheet 1

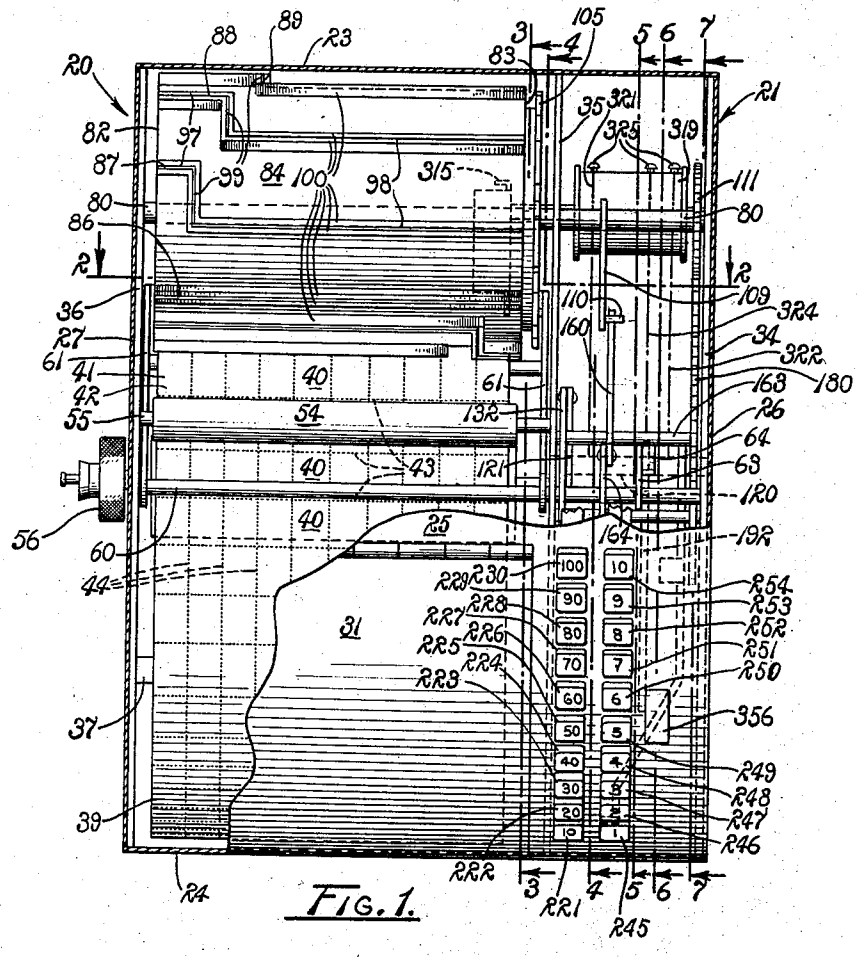


FIG. 1.

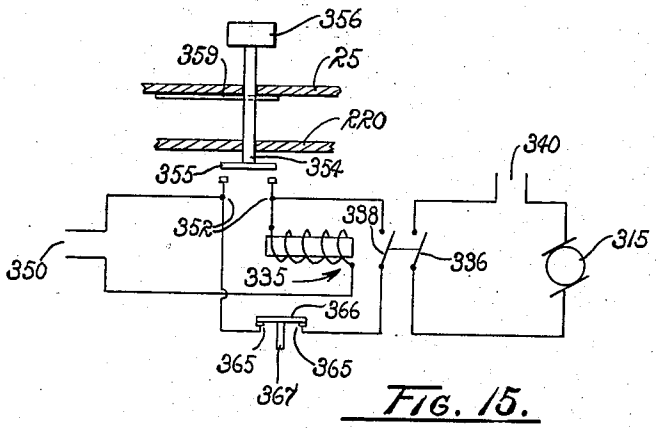


FIG. 15.

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5 Sheets-Sheet 2

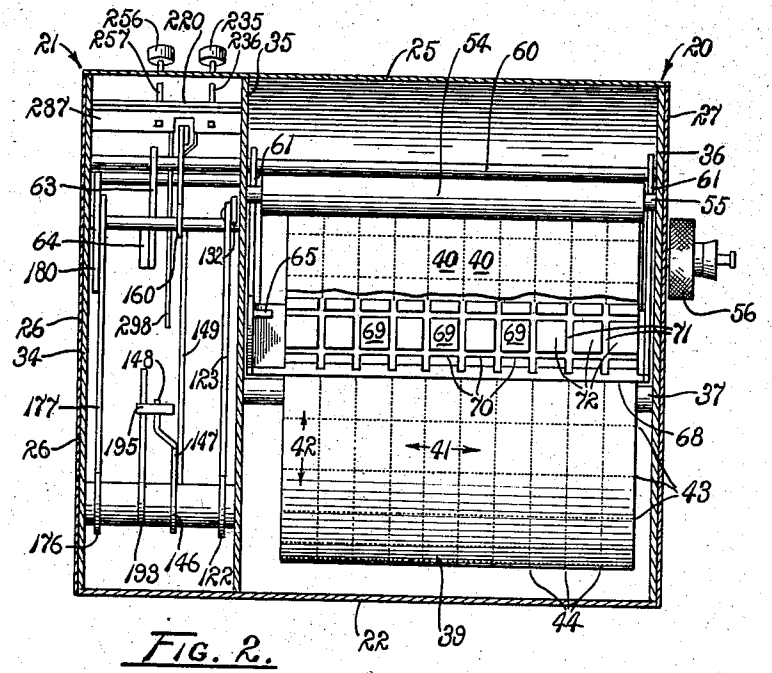


FIG. 2.

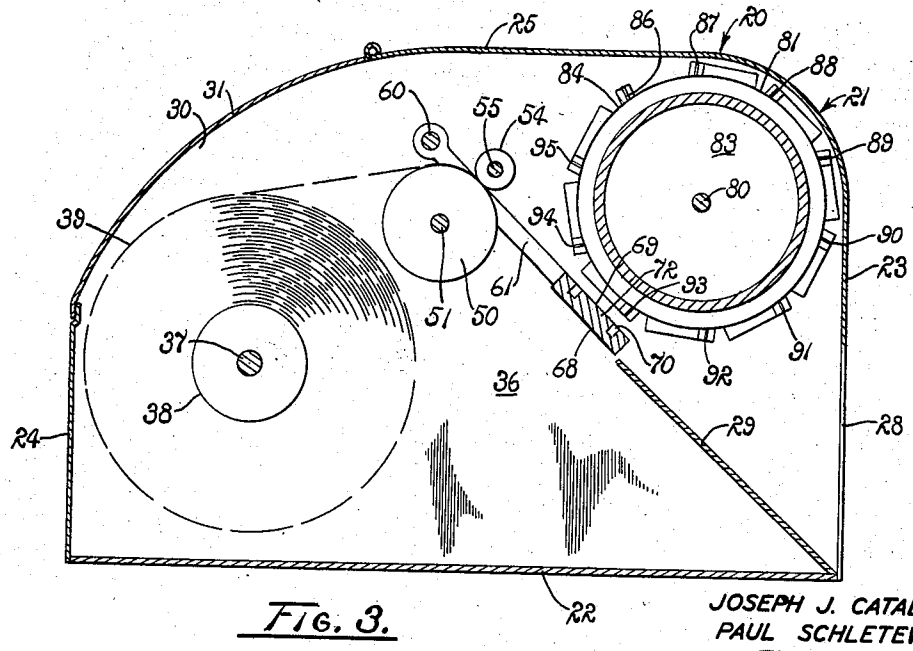


FIG. 3.

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5 Sheets-Sheet 3

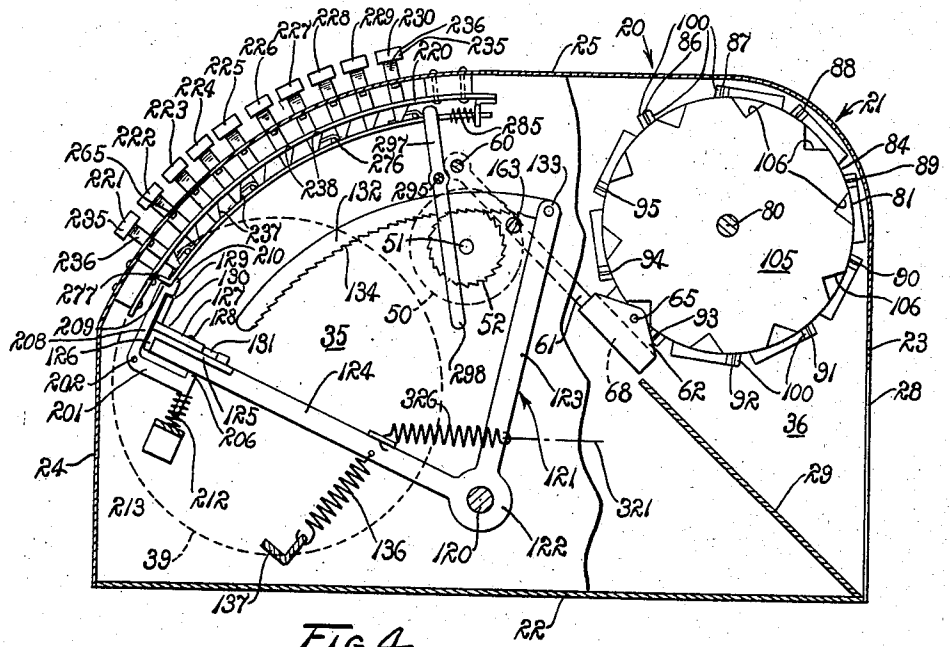


FIG. 4.

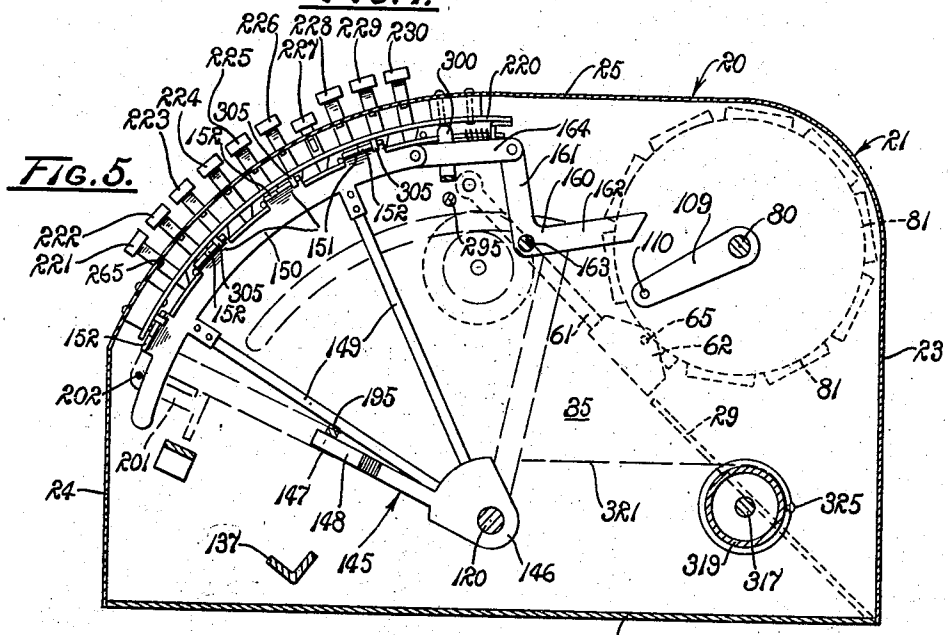


FIG. 5.

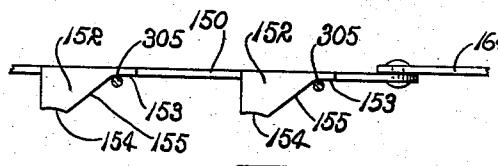


FIG. 13.

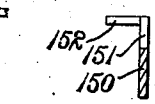


FIG. 14.

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5 Sheets-Sheet 4

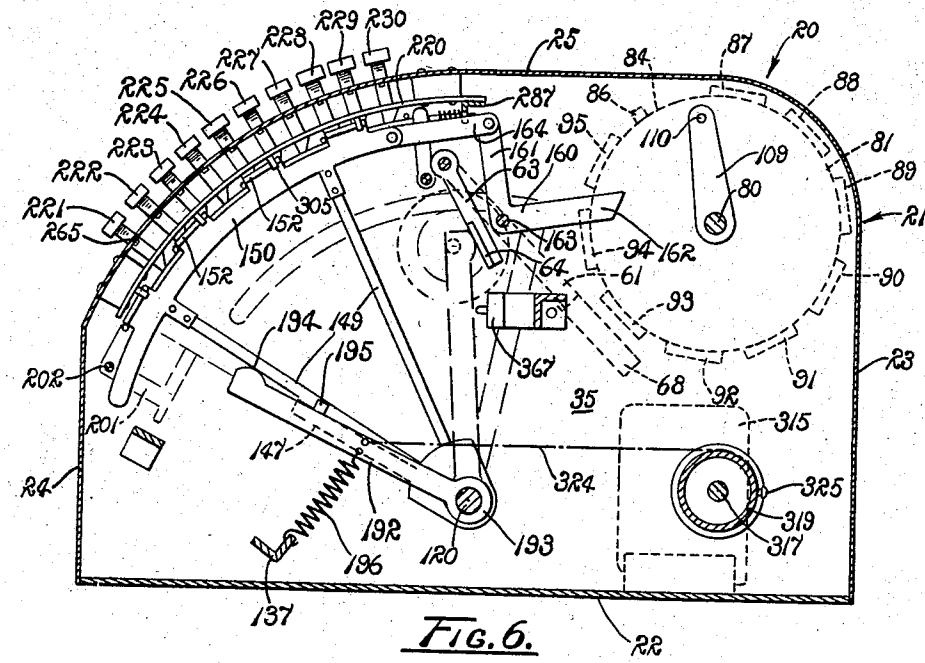


FIG. 6.

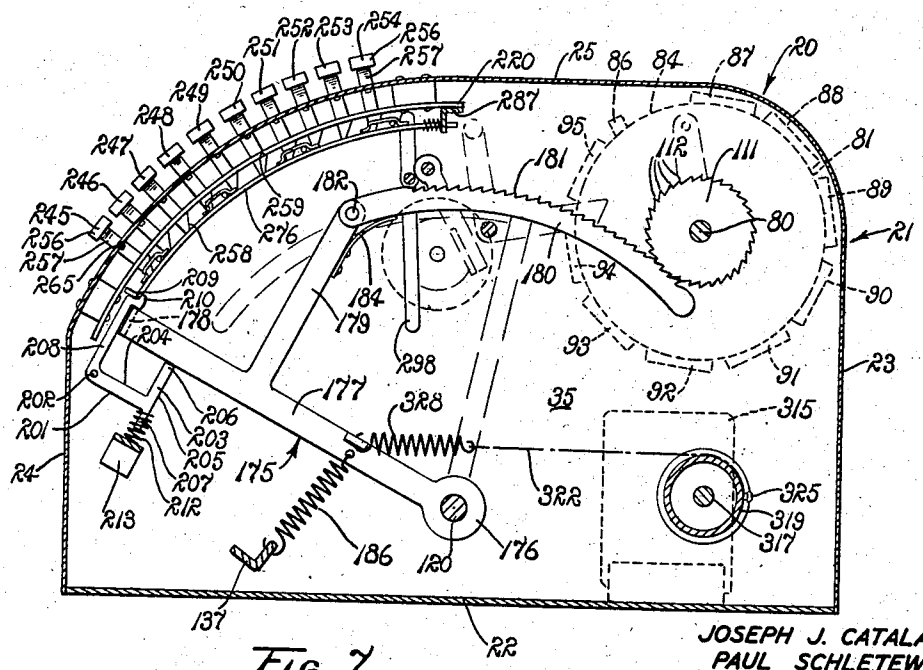


FIG. 7.

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5 Sheets-Sheet 5

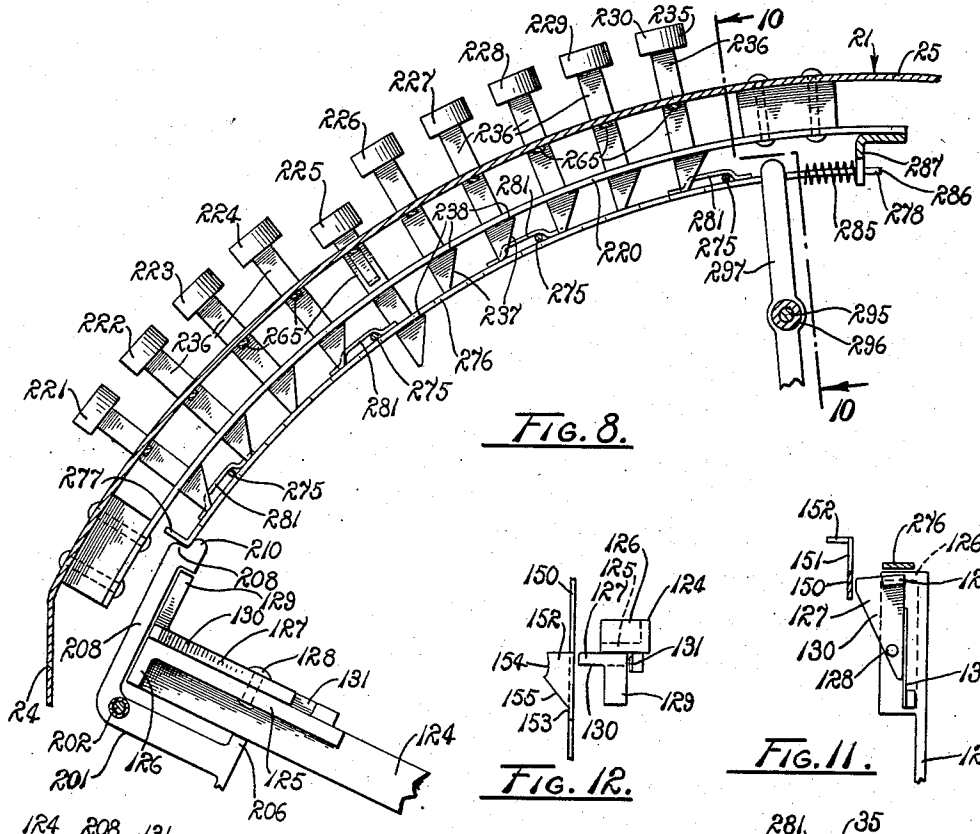


FIG. 8.

FIG. 12.

FIG. 11.

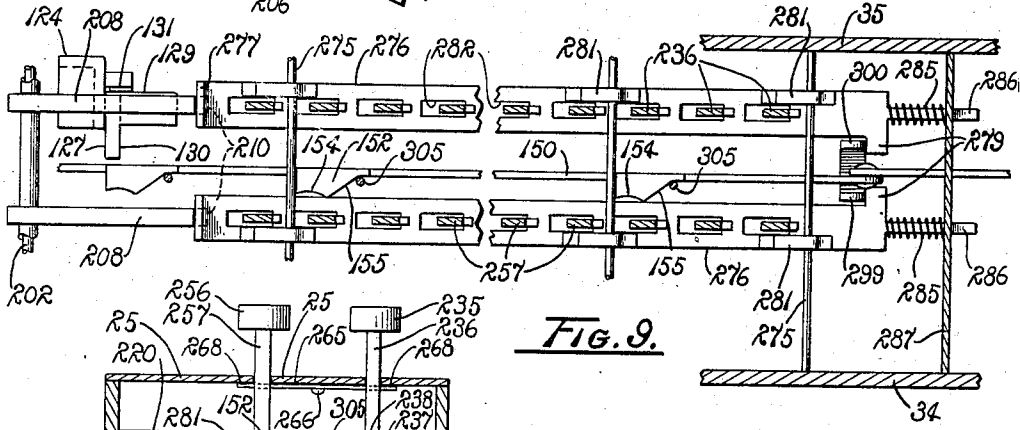


FIG. 9.

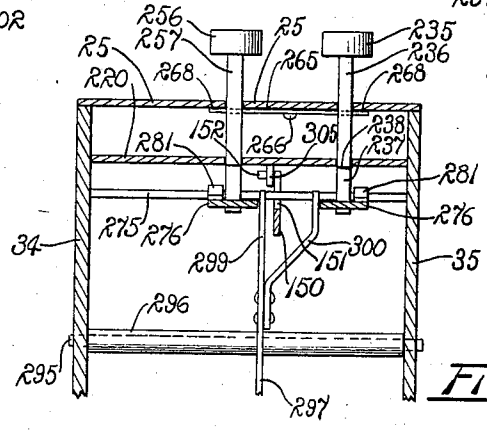


FIG. 10.

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United States Patent Office 2,876,835
Patented Mar. 10, 1959

2,876,835

STAMP DISPENSING MACHINE HAVING SELECTIVELY POSITIONABLE CUTTERS OPERABLE TO SEVER A PREDETERMINED NUMBER OF STAMPS

Joseph J. Catalano, Paul Schletewitz, and Thomas Coffey, Fresno, Calif.

Application August 27, 1956, Serial No. 606,433

11 Claims. (Cl. 164—42)

The present invention relates to a stamp dispensing machine and more particularly to an apparatus for severing and dispensing selectable predetermined numbers of stamps from sheets of stamps.

The trading stamp has long been employed as a device for increasing sales and is presently enjoying increased popularity. As is well-known, these stamps are given to purchasers in an amount proportional to their purchases. They are usually distributed by sales clerks or cashiers at the time of purchase. As far as can be determined, in the past this distribution has been completely a manual task. That is, the clerk or cashier manually tears a number of stamps from a sheet thereof or selects a number of stamps from drawers in which they have previously been segregated, in either case corresponding to the amount of the purchase, and hands them to the customer.

In addition to the mental task of calculating the number of stamps corresponding to the purchase, the manual tearing of the stamps results in loss of considerable time, is subject to error and stamp damage, and increases the labor cost. The problem is especially aggravated in large super markets which are heavy users of trading stamps, where the delay of waiting in line for purchased goods to be checked out is increased to an even greater extent than normally experienced.

Although the subject invention is conveniently described in connection with the cutting of stamps from a sheet thereof, it is to be understood that it is not to be so limited. As the description proceeds it will be evident that the invention has broader application where similar problems are involved.

Accordingly, it is an object of the present invention to provide a dispensing machine adapted to cut segments from a sheet of material.

Another object is to provide a machine for dispensing selectable predetermined numbers of stamps in a convenient, rapid, accurate and easy manner.

Another object is to reduce the time, labor, and cost, and to increase the accuracy and efficiency involved in the distribution of trading stamps by merchandisers.

Another object is to prevent stamp damage and mutilation frequently experienced when manually tearing stamps from a sheet thereof.

Another object is to provide a cutter having blades selectably operable to sever a predetermined number of stamps from a sheet thereof.

Another object is to provide an apparatus which cuts and dispenses a predetermined number of stamps from a sheet thereof in response to the depression of selected keys.

Another object is to provide a stamp machine which is compact, easy to operate, durable in construction, dependable in operation, adapted for dispensing stamps and like articles from a sheet thereof, and which is highly effective for accomplishing its intended purposes.

These and other objects will become more fully apparent upon reference to the following description.

In the drawings:

Fig. 1 is a top plan view of the stamp machine of the present invention having portions thereof broken away and in section to show the interior parts of the machine.

Fig. 2 is a transverse vertical section taken at a position indicated by line 2—2 of Fig. 1.

Fig. 3 is a vertical longitudinal section taken on line 3—3 of Fig. 1.

Fig. 4 is a vertical longitudinal section taken on line 4—4 of Fig. 1.

Fig. 5 is a longitudinal vertical section taken on line 5—5 of Fig. 1.

Fig. 6 is a longitudinal vertical section taken on line 6—6 of Fig. 1.

Fig. 7 is a longitudinal vertical section taken on line 7—7 of Fig. 1.

Fig. 8 is a somewhat enlarged, fragmentary vertical section of a portion of the machine of the present invention.

Fig. 9 is a sectional view taken through structure illustrated in Fig. 8.

Fig. 10 is a transverse section taken on line 10—10 of Fig. 8.

Fig. 11 is a somewhat enlarged, fragmentary face view of a portion of the main row selecting bracket and illustrates in particular a shift plate forming a part thereof.

Fig. 12 is a top view of the structure illustrated in Fig. 11.

Fig. 13 is a somewhat enlarged, fragmentary edge view of the auxiliary row selecting bracket.

Fig. 14 is a section taken through a portion of the auxiliary row selecting bracket.

Fig. 15 is a schematic diagram showing an electrical circuit employed in the present invention.

Referring more particularly to the drawings, a stamp machine or apparatus is generally indicated by the numeral 20 in Fig. 1. The machine includes a housing 21 having a flat bottom wall 22, a rear wall 23 upstanding from the bottom wall, a front wall 24 upstanding from the bottom wall and slightly shorter than the rear wall, a top wall 25 upwardly curved from the rear wall and extended forwardly substantially parallel to the bottom wall for a distance and thence curved downwardly to join the front wall, and opposed side walls 26 and 27. The housing has a hollow interior and has an elongated dispensing opening 28 in the lower portion of the rear wall, as best seen in Fig. 4. An inclined stamp dispensing chute 29 is mounted between the side walls having a lower edge adjacent to the dispensing opening and an upper edge extended upwardly and forwardly in the housing. The upper wall has an access opening 30 therein and a door 31 is hinged on the upper wall for pivotal movement between a closed position over the access opening and an open position.

A plurality of spaced, parallel, mounting panels 34, 35, and 36 are longitudinally extended in the housing 21 in upright positions from the bottom wall 22 and relatively adjacent to the side walls, it being noted that the panel 35 is spaced intermediate the panels 34 and 36. A stamp drum shaft 37 is extended between the mounting panels 35 and 36 substantially parallel to the bottom wall, and a substantially cylindrical stamp receiving drum 38 is rotatably mounted on the shaft. An elongated sheet of stamps 39 is received on the stamp drum in rolled or wound condition therearound. The sheet of stamps includes a plurality of stamps 40 of uniform length and width arranged in the sheet in transverse rows indicated at 41 and longitudinal rows indicated at 42. The transverse rows of stamps are preferably separated by transverse perforated lines 43 while the longitudinal rows are preferably separated by longitudinal perforated lines 44. The drum and shaft together with the rolled sheet are

adapted to be releasably fitted between the mounting panels so as to enable convenient periodic insertion of a new roll of stamps upon depletion of a previous roll through the access opening 30. It will be evident that the sheet of stamps may be unwound from the drum by pulling on an edge of the sheet to move the sheet in a direction normal to the transverse rows.

With particular reference to Fig. 3, a feed roller 50 provides oppositely extended trunnions 51 rotatably mounted in respectively adjacent mounting panels 35 and 36 and supporting said roller in a position substantially parallel to the stamp drum shaft. A ratchet gear 52, seen in Fig. 4, is mounted on one end of the feed roller for a purpose to be described. An elongated guide roller 54 is also rotatably supported between the mounting panels by endwardly extended trunnions 55. The guide roller is substantially parallel to the feed roller in closely adjacent relation thereto. The sheet of stamps 39 is inserted between the feed roller and the guide roller and is frictionally engaged therebetween. The sheet is motivated upon rotation of the feed roller, the guide roller functioning to maintain the sheet in frictional contact with the feed roller. A knob 56 is preferably connected to one of the trunnions 51 for manually rotating the feed roller externally of the housing 21.

A cutter plate support shaft 60, best seen in Figs. 1 and 2, is rotatably mounted in the mounting panels 34, 35, and 36 transversely of the housing 21. A pair of mounting arms 61 are rigidly connected to the support shaft between panels 35 and 36 and radially extended therefrom between said panels. With reference also to Fig. 4, an enlarged guide flange 62 is integrally associated with the arm adjacent to panel 35 at the extremity of such arm. A control arm 63 is also rigidly connected to the support shaft and radially extended therefrom between mounting panels 34 and 35. The control arm is in acute angular relation to the arm, as seen in Fig. 6, and provides a laterally extended abutment flange 64. A guide pin 65 is inwardly extended from the guide flange for a purpose to be described.

An elongated, substantially rectangular, cutter plate 68, best seen in Fig. 2, is rigidly extended between the mounting arm 61 and has a stamp engaging face 69 providing a pair of spaced, longitudinal grooves 70 and a plurality of substantially equally spaced, transverse grooves 71. The longitudinal and transverse grooves are intersecting and outline a plurality of stamp engaging blocks 72 having lengths and widths corresponding to the lengths and widths of the stamps 40 to be cut from the sheet 39. The cutter plate is supported on the mounting arms 61 slightly below and rearwardly of the feed roller 50, as noted in Fig. 3, so that the sheet of stamps can be moved between the rollers 50 and 54 onto the stamp engaging face 69 of the plate. In this regard also, it is to be noted that the cutter plate is disposed in substantial alignment with the dispensing chute 29 being positioned slightly forwardly and upwardly from the upper edge of the chute. The cutter plate is thus located so that when the sheet moves thereacross, a transverse row 41 of the stamps is aligned with the stamp engaging blocks and the longitudinal and transverse lines 44 and 43 overlie the transverse and longitudinal grooves, respectively.

Directing attention to Figs. 1, 3, and 4, a cutter drum shaft 80 is journaled in the panels 34 and 36 in the rear of the housing 21 somewhat below the cutter plate support shaft 60 but above the cutter plate 68. The cutter drum shaft is also substantially parallel to the bottom wall 22 transversely in the housing 21. A substantially cylindrical cutter drum 81 having opposite end walls 82 and 83 and a peripheral surface 84 is mounted for rotation in the housing on the shaft 80.

An elongated, longitudinally extended, substantially straight cutter blade 86 is substantially radially outwardly extended from the peripheral surface of the drum 81. A plurality of substantially Z-shaped cutter blades 87 to 95, both inclusive, are also radially outwardly extended from the surface of the drum and are circumferentially spaced therearound. As best seen in Fig. 1, each of the Z-shaped blades has a pair of longitudinal end portions 97 and 98 in parallel spaced relation interconnected by a transverse portion 99. The longitudinal end portions are spaced from each other by an amount equal to the length of a stamp 40, that is, the distance between a pair of adjacent transverse lines 43. The transverse portions 99, however, are each differently spaced from opposite ends of the drum. The blade 87 adjacent to the straight blade 86 has its transverse portion spaced from the end wall 82 a distance equal to the width of one stamp; the transverse portion of blade 88 is spaced from wall 82 the distance equal to the width of two stamps; and so on up to blade 95 on the opposite side of the straight blade 86 from blade 87, which has its transverse portion spaced nine stamp lengths from wall 82. It is to be understood that a stamp width is equivalent to the distance of a pair of adjacent longitudinal perforate lines 44 or grooves 71. Preferably, rubber strips 100 are secured on opposite surfaces of the blades and extend slightly radially outwardly therefrom for a purpose to be described. A drum positioning disc 105 is secured to the drum in adjacent spaced relation to end wall 83 and has a plurality of V-shaped notches 106 cut in the peripheral edge thereof and spaced therearound at positions corresponding to the blades. This is best illustrated in Figs. 1 and 4. The drum is thus mounted for rotation to bring selected blades into opposed relation to the cutter plate 68. When properly positioned, the blades fit into the longitudinal and transverse grooves 70 and 71. For example, the straight blade 86 is adapted to fit into the longitudinal groove 70 next to the chute 29. The longitudinal portions 97 and 98 of the Z-shaped blades are adapted to fit into the longitudinal grooves while the transverse portions 99 are adapted to fit in corresponding transverse grooves 71. The cutter plate is pivotal toward and away from the cutter drum 81 so as to bring the sheet of stamps 39 into engagement with a selected blade. The guide pin 65 slidably cams into corresponding notches 106 precisely to bring the blades into registry with the grooves. The blades sever the transverse and/or longitudinal perforated lines to cut selected rows of stamps from the sheet, as will be evident, whereby the stamps are released to slide down the chute 29. The rubber strips initially engage the sheet on opposite sides of the perforated lines frictionally to hold the sheet in place prior to and during engagement of the blades with the sheet.

A lever 109 rigidly secured to the cutter drum shaft 80 and radially extended therefrom mounts an adding peg 110 which is extended substantially parallel to the cutter drum shaft at a position intermediate the straight blade 86 and the Z-shaped blade 87 for a purpose to be described. A ratchet gear 111 is mounted on the shaft 80 adjacent to the panel 34 and has a plurality of ratchet teeth 112 extended therefrom.

Referring to Fig. 4, a mounting shaft 120 is supported in the mounting panels 34 and 35 adjacent and parallel to the bottom wall 22, concentric to the curved portion of the top wall 25, and substantially beneath the feed roller 50. A main row selecting or feed control bracket 121 provides a bearing 122 rotatably fitted on the mounting shaft, a radially extended pawl mounting arm 123, a limit arm 124 radially extended in substantially right angular relation to the pawl mounting arm and having laterally extended, longitudinal and transverse flanges 125 and 126 adjacent to the upper end thereof, and a triangular shift plate 127 pivotally connected to the longitudinal flange by a pin 128 so as to be pivotal on an axis normal to the mounting shaft 120. For this structure reference should also be made to Figs. 12 and 13. The shift plate has a forwardly disposed main key engaging surface 129 and an auxiliary key engaging surface 130 rearwardly spaced from the main surface 129.

A leaf spring 131 urges the shift plate toward the mounting panel 34. An arcuate pawl 132 is pivotally connected at the upper end of the mounting arm 123 by means of a pin 133 and has gear teeth 134 in mesh with the teeth of the ratchet gear 52 on the feed roller 50. The row selecting bracket is mounted for pivotal movement in a clockwise direction, as viewed in Fig. 4, from a retracted position to a plurality of upwardly extended operating positions, and return. A return tension spring 136 of predetermined tension interconnects the row selecting bracket and a brace 137 extended between the panels 34 and 35 for yieldably holding the bracket in retracted position.

As best seen in Fig. 5, an auxiliary row selecting or feed control bracket 145 provides a hub 146 rotatably fitted on the mounting shaft 120 adjacent to the main row selecting bracket 121 and between such bracket and the mounting panel 34, the latter being best indicated in Fig. 1. The auxiliary bracket has a reset control arm 147 radially extended from the housing providing a laterally offset portion 148. The bracket also has a pair of radially extended, transversely resiliently flexible, mounting arms 149 and an arcuate pressure plate 150 mounted at the upper ends of the arms. The pressure plate provides a plurality of spaced radially extended projections 151, and tabs 152 laterally extended in right angular relation from the projections in a direction away from the main bracket, as shown in Figs. 14 and 15. The tabs have inner resting edges 153, outer concave seating edges 154, and outwardly inclined camming edges 155 extended from the resting edges to the seating edges.

A bell crank 160 provides a connecting arm 161 and an actuating arm 162 right angularly extended from the connecting arm into the path of movement of the adding peg 110. The bell crank is mounted for pivotal movement on the mounting panel 35 by pin 163 and a link 164 pivotally interconnects the pressure plate 150 and the connecting arm 161. It is to be understood, therefore, that when the adding peg engages the cutting arm of the bell crank, the auxiliary bracket is pivoted from a retracted position to an operating position.

A blade selecting bracket 175 is best shown in Fig. 7 and includes a bearing 176 rotatably mounted on the shaft 120 adjacent to the side wall 26. The bracket 175 has a radially inwardly extended limit arm 177 having a laterally inturned upper end 178, and a pawl mounting arm 179 substantially perpendicularly, upwardly extended from the limit arm. An arcuate pawl 180 provides teeth 181 in mesh with the ratchet gear 111 associated with the cutter drum 81 and is pivotally connected to the mounting arm 179 by pin 182. A leaf spring 184 has an end connected to the mounting arm and an opposite end resiliently bearing against the pawl 180 to urge it into engagement with the ratchet gear 111. The blade selecting bracket is adapted for pivotal movement between a retracted position and a plurality of upwardly extended operating positions. A return tension spring 186 of predetermined tension interconnects the blade selecting bracket and the brace 137 for yieldably urging the bracket into retracted position.

A cutter plate depressing arm 192, best seen in Fig. 6, includes a bearing 193 rotatably mounted on the shaft 120 at a position between the blade selecting bracket 175 and the auxiliary row selecting bracket 145. The depressing arm has an upper abutment 194 and an intermediate, laterally extended, return finger 195. The depressing arm is arranged in a vertical plane common to the abutment flange 64 on the control arm 63 of the cutter plate 68 so that upon predetermined rotation of the depressing arm from a retracted lower position to an upper operating position, the abutment 194 engages the flange 64 to pivot the cutter plate in a direction toward the cutter drum 81. Additionally, the laterally offset portion 148 of the row selecting bracket 145 lies in the path of movement of the return finger 195. The latter is adapted to engage such offset portion to return the auxiliary bracket from an operating position to its retracted position incident to movement of the depressing arm from its operating to its retracted position, all as more fully explained hereinbelow. The depressing arm is yieldably held in retracted position by a return spring 196 connected to the brace 137.

Latches 201 are individually pivotally mounted in the front of the housing 21 on pivot bolts 202 extended between the panels 34 and 35. The latches each have a reset arm 204 having an inner portion 204 and an outer portion 205 perpendicular to the inner portion and providing a laterally bent end 206. A tail portion 207 is extended from the reset arm in the opposite direction from the outer portion. Each latch also has a catch arm 208 right angularly extended from the inner portion of the reset arm which provides a stop portion 209 extended toward the outer portion of the reset arm and a nose portion 210 right angularly outwardly extended from the stop portion. A compression spring 212 encircles the tail portion of each latch and is in abutment against the reset arm and a stop 213 secured in the housing between the mounting panels 34 and 35. The latches are mounted in planes individually corresponding to the planes of the row selecting and blade selecting brackets 121 and 175 and are adapted for pivotal movement between positions latching their respective brackets in retracted positions, as seen in Figs. 4 and 7, and positions releasing the brackets for movement to their operating positions. In their latching positions, the stop portions 209 respectively engage the limit arm 177 of the bracket 175 and the main key engaging surface 129 of bracket 121. Further, the limit arms abut the reset arms to compress springs 212. The return springs 136 and 186 are of greater strength than the compression springs 212 so that the return springs prevent movement of their respective brackets out of the latches by urgence of the compression springs alone.

With continuing reference to Fig. 8 and to Fig. 1, there is shown an arcuate key guide plate 220 of the same curvature as the curved portion of the top wall 25, rigidly mounted within the housing 21 on the inner surface of the top wall and along the curved portion thereof. The guide plate preferably extends between the mounting panels 34 and 35. A plurality of row selecting or feed control keys 221 to 230, both inclusive, are mounted in a common vertical plane, substantially coincident with the main row selecting bracket 121, and extended through openings in the top wall of the housing provided for the purpose. The guide plate provides slots individually slidably receiving the keys for guiding them for movement between depressed and retracted positions. Each of the keys has a finger tab 235 and a shank 236 slidably fitted through the guide plate having a lower inclined camming edge 237 and a locking edge 238 substantially parallel to the guide plate. More specifically, the shanks are in a common plane with either the main or auxiliary key engaging surfaces 129 or 130, depending on the position of the shift plate 127, as will be seen.

As best illustrated in Figs. 1 and 7, a plurality of blade selecting or cutter drum control keys 245 to 254, both inclusive, are mounted in a common vertical plane, substantially coincident with the blade selecting bracket 175, and in adjacent spaced relation to the row selecting keys 221 to 230, inclusive. The blade selecting keys include finger tabs 256, and shanks 257 extended through the top wall 25 and slidable through the key guide plate 220 having camming edges 258 and locking edges 259. More specifically, the shanks are in a common plane with the inturned end 178 of the limit arm 177. The blade selecting keys are thus also movable between depressed and retracted positions. A plurality of flat springs 265 are secured to the top wall 25 of the housing 21 between the sets of keys 221 to 230, inclusive, and 245 to 254, inclusive, by rivets 266, and have opposite ends 268

outwardly extended individually through corresponding shanks 236 and 257 of the keys for yieldably urging the keys into retracted positions.

As seen in Figs. 4, 7, and 8, a plurality of support rods 275 are transversely extended between the mounting panels 34 and 35 below the key guide plate 220 and substantially equally radially spaced from the mounting shaft 120. Arcuate key locking and latch releasing slide bars 276 having the same curvatures as the key guide plate 220 provide forward upturned ends 277 and rear ends 278 having tabs 279 inturned toward each other, as best seen in Fig. 10. A plurality of straps 281 are secured to the upper surface of the slide bars and individually receive the support rods for slidably mounting the bars in concentric positions relative to the mounting shaft 120. The bars have longitudinally spaced elongated slots 282 therein aligned with the row selecting keys 221 to 230, inclusive, and the blade selecting keys 245 to 254, inclusive. The lower extremities of the shanks 236 and 257 of the keys are slightly extended through the slots when the keys are retracted. The bars are slidable from retracted positions upwardly and rearwardly to operating positions on the support rods incident to depression of any one of the keys which causes the camming edges 237 and 258 to engage the edges of the slots 282 to force the respective bars upwardly. When the keys are fully depressed, the locking edges 238 and 259 snap underneath the slide bars to lock the keys in depressed positions. When the slide bars are in retracted positions, their upturned front ends are adapted to engage the stop and nose portions 209 and 210 of their respectively associated latches 201, if the latches are in latching positions. In this manner the bars releasably hold the latches in latched positions. Compression springs 285 encircle forwardly extended portions 286 on the slide bars and have opposite ends abutting the bars and a flange 287 secured between the mounting panels 34 and 35 in the housing 21. As best seen in Fig. 9, these forwardly extended portions are slidably mounted in the flange and together with the straps 281 and support rods guide longitudinal movement of the bars.

With reference to Fig. 10, a pivot rod 295 is mounted between the mounting panels 34 and 35 below the slide bars 276 and adjacent to the rear ends thereof. Spacer sleeves 296 are rotatably fitted on the rod, and an elongated key release lever 297 is pivotally connected to the rod between the sleeves and upwardly and downwardly extended therefrom. The key release lever has a lower end 298, seen in Figs. 4 and 7, in the path of movement of the return finger 195 on the cutter plate depressing arm 192 and an upper bifurcated end having one prong 299 extended in front of one of the inturned tabs 279 and the other prong 300 extended in front of the other inturned tab.

With reference to Figs. 5, 10, and 13, it is to be noted that a plurality of rigid camming pins 305 are downwardly extended from the key guide plate 220 in substantially radial relation to the mounting shaft 120 and positioned against the resting edges 153 of the tabs 152 of the arcuate pressure plate 150 of the auxiliary row selecting bracket 145. Thus, when the row selecting bracket is pivoted upwardly from its retracted position, the camming edges 155 individually ride along the camming pins, which are rigid in the housing 21 and thus cause the mounting arms 149 of the auxiliary bracket to flex laterally toward the main row selecting bracket 121. The pressure plate is laterally adjacent to the shift plate 127 of the main row selecting bracket so that it pivots the shift plate on pin 128 when urged into engagement therewith by the described cooperative action between camming edges and camming pins. The effect of lateral movement of the shift plate is to force the main key engaging surface 129 out of alignment with the row selecting keys 221 to 230, inclusive, and to bring the auxiliary key engaging surface 130 into alignment with such keys.

An electrical motor 315 is mounted in the housing 21 on the bottom wall 22 below the cutter drum 81, as best seen in Figs. 1, 6, and 7. The motor employed has an output shaft 317 and is of a well-known construction to perform certain desired functions. Thus, upon energization, the shaft turns through approximately 200° where it stops. Upon de-energization, the shaft is permitted to rotate in an opposite direction back to its original or zero position.

A substantially cylindrical reel 319 is axially mounted on the shaft 317 for rotation therewith, and three headed lugs 325 are radially outwardly extended from the reel in axially spaced, longitudinally aligned relation, as best seen in Fig. 1. Elongated cables 321, 322, and 324 provide ends individually connected to the lugs and oppositely extended ends. The extended end of the cable 324 is connected to the cutter plate depressing arm 192, as seen in Fig. 6. Actuate springs 326 and 328 respectively interconnect the extended ends of the cables 321 and 322 to the row selecting bracket 121, as seen in Fig. 3, and to the blade selecting bracket 175, as seen in Fig. 7.

An electrical circuit is provided for controlling the motor 315 and in this regard attention is invited to Fig. 15. An electrical relay 335 provides motor contacts 336 and holding contacts 338 both of which are open when the relay is de-energized. The motor contacts are connected in series circuit with the motor and a convenient source of voltage 340 for energizing the motor when the contacts 336 are closed.

Another source of voltage 350 is connected in series circuit with the coil of the relay 335 and with a pair of relay energizing contacts 352. A shank 354 is extended through the top wall 25 of the housing 21 and is slidable through the key guide plate 220 in a manner previously described in relation to the other keys. A contact bar 355 is secured to the shank below the guide plate, and a button 356 is secured to the shank exteriorly of the housing for moving the contact bar between a depressed position where it electrically bridges the energizing contacts and a retracted upper position spaced from the energizing contacts, the latter being shown in Fig. 15. It is to be understood that the contact bar is insulated from the housing and the button. A leaf spring 265 is provided for yieldably urging the shank 354 into retracted position.

The series combination of the holding contacts 338 and a pair of relay de-energizing contacts 365 is connected in parallel across the energizing contacts 352. A contact bar 366 normally electrically bridges the de-energizing contacts, and a shank 367 is connected to the contact bar and extended therefrom. By reference to Fig. 6, it will be noted that the de-energizing contacts 365, the contact bar 366, and the shank 367 form a switch mounted in the housing 21 between the panels 34 and 35. The shank is forwardly extended in a common vertical plane with the cutter plate depressing arm 192 so that when the latter is in its fully operating position, it engages the shank to move the contact bar out of engagement with the de-energizing contacts.

Operation

The operation of the described embodiment of the subject invention is briefly summarized at this point.

It is initially assumed that the machine 20 is loaded with a rolled sheet of stamps 39 on the drum 38, and that the leading edge of such sheet is extended between the feed roller 50 and the guide roller 54 and rested on the cutter plate 68. However, it is to be noted that the stamps overlie the stamp engaging blocks 72 and the leading edge of the sheet is adjacent to the longitudinal groove 70 closest to the chute 29. Further, the cutter drum 81 is initially set with the straight blade 86 in opposed relation to the longitudinal groove 70 closest to the chute.

In order to obtain a single stamp 40, the blade selecting key 245 is depressed. This forces the key locking

and latch releasing bar 276 associated therewith upwardly and rearwardly in the housing 21 and holds the key in depressed position in the path of movement of the limit arm 177 of the blade selecting bracket. This preconditions the corresponding latch 201 for movement to released position. However, the latch does not release because the return spring 186 holds the blade selecting bracket 175 against the reset arm 203.

Next, the dispense button 356 is depressed to energize the relay 335. This closes the holding contacts 338 and the motor contacts 336. When the dispense button is released, the holding contacts maintain the relay in energized condition. It will be evident that the motor contacts, being closed, complete the circuit to the motor 315 whereby the shaft 317 rotates in a clockwise direction, as viewed in Figs. 6 and 7. The cables 321, 322, and 324 are thus wound around the reel 319. This applies a rearward force on the row selecting and blade selecting brackets 121 and 175 tending to urge them upwardly and rearwardly toward their operating positions. The row selecting bracket does not move at this time, however, since its associated latch 201 is held in latching position by its associated locking bar 276.

The latch 201 associated with the blade selecting bracket 175 is conditioned for release, as above described, so that when the return spring 186 is overcome by the rearward force applied to the cable 322, the blade selecting bracket moves toward operating position. This causes the latch to pivot in a counterclockwise direction, as viewed in Fig. 7, out of the way of the limit arm 177. When the upper end 178 of the limit arm abuts the depressed shank 257 of the key 245 it stops its clockwise movement. Further rotation of the reel 319 is permitted because of the connection of the cables 321 and 322 to their respective brackets by springs 326 and 328. However, movement of the blade selecting bracket causes the pawl 180 to rotate the cutter drum 81 one blade distance to bring the blade 87 into opposed relation to the cutter plate 68. It is to be remembered that the present discussion is based on the assumption that blade 86 is initially opposite to the cutter plate 68 so that the next blade moving in front of the cutter plate is blade 87. Specifically, the longer longitudinal end portion 98 of such blade is opposite the longitudinal groove adjacent to the chute 29, the intermediate portion 99 is opposite the transverse groove 71 spaced one stamp width from the end 82 of the drum, and the shorter longitudinal portion 97 is opposite to the longitudinal groove 70 closest to the feed roller 50.

The cutter plate depressing arm 192 is positively connected to the reel 319 by the cable 324 so that the depressing arm is continuously moved in a clockwise direction, as viewed in Fig. 6, during rotation of the reel. Inasmuch as the arm 192 has farther to travel than brackets 121 or 175 before reaching its operating position, the blade 87 is already properly positioned before the depressing arm is brought into action. Incidentally, it is to be noted that this is true regardless of which key is depressed. Thus, when the depressing arm is almost vertical, the upper abutment 194 engages the flange 64 of the control arm 63 to rotate the support shaft 60. This urges the cutter plate 68 toward the cutter drum 81. This, of course, brings the blade 87 into engagement with the opposed perforated lines 43 and 44 of the sheet of stamps 39 whereby to cut a single stamp from the sheet. The stamp is deposited on the chute 29 along which it slides downwardly for access through the dispense opening 28.

Immediately after the stamp has been dispensed, the cutter plate depressing arm 192 moves the contact bar 366 out of engagement with the de-energizing contacts 365. This opens the circuit to the relay 335 whereby the holding contacts 338 and the motor contacts 336 open. This de-energizes the motor 315 so that the shaft 317 is conditioned to return to zero position. The re-

turn springs 186 and 196 now take over to apply forces in a forward direction on their respectively associated blade selecting bracket 175, and cutter plate depressing arm 192. The return finger 195 initially engages the key release lever 297 which pivots its upper end rearwardly into engagement with the tabs 279 on the locking bars 276. This slides the bars upwardly and permits the depressed key 245 to be retracted by its spring 265. As soon as the key is retracted, the bar 276 is free to be urged to its retracted position by spring 285. The finger 195 only engages the key release lever momentarily so that the bar returns to retracted position. It is to be noted at this point that when the limit arm 177 engages the reset arm 203 of its respective latch 201, it automatically pivots the latch into latching position where it is held by the spring 186 so that when the locking bar moves downwardly, it engages the stop portion 209 to hold the latch in latching position.

If any other number of stamps from two to nine, both inclusive, is desired, the corresponding key 246 to 253 is depressed and the action of the machine is similar to that described above in regard to obtaining one stamp.

If ten stamps are initially desired, either the key 254 or the key 221 may be depressed. At this point, it is to be noted that the key 254 could be omitted, if preferred, without affecting the operation of the machine. However, assuming the machine is initially set as described above in connection with the dispensing of one stamp, and assuming that the key 221 and the button 356 are depressed, the following action occurs. The drum 81 is rotated 360° to bring the straight blade 86 back into opposition to the longitudinal groove 70 closed to the chute 29. The manner in which this occurs is now believed to be understood.

Rotation of the drum 81 in this manner also causes the adding peg 110 to engage the bell crank 160 to pivot the auxiliary row selecting bracket 145. As above explained, this causes the pressure plate 150 to urge the shift plate 127 from a position with the main key engaging surface 129 in alignment with the stop portion 209 of its associated latch 201 and to bring the auxiliary key engaging surface 130 into alignment with such stop portion. This permits the main row selecting bracket 121 to move upwardly and rearwardly until the auxiliary key engaging surface abuts the stop portion 209.

When the row selecting bracket 121 pivots as described, it rotates the feed roller 50 to motivate the sheet of stamps 39 across the face 69 of the cutter plate 68 until the second transverse row of stamps overlie the stamp engaging faces 69 of the cutter plate 68 with the transverse perforate lines on either side thereof aligned with the grooves 70. It is thus evident that the distance between the surfaces 129 and 130 is such as to enable the feed roller to move the sheet of stamps one stamp length or one transverse row.

As before, the cutter plate 68 is forced against the drum 81 by the depressing arm 192 and the blade 86 cuts a full row, or ten stamps 40, from the sheet 39.

Likewise, the return action is similar to that when only one to nine stamps 40 are dispensed except that the spring 136 returns its bracket 121 and the latch 201 associated therewith is also returned to initial latching condition. Further, the return finger 195 also engages the laterally offset portion 148 of the auxiliary row selecting bracket 145 to pivot such bracket in a counterclockwise direction, as viewed in Fig. 5, so as to permit the arms 149 to flex back to normal position and thus to move the pressure plate 150 away from the shift plate 127. The leaf spring 131 associated with the shift plate then urges it back into a position with the main key engaging surface 129 in alignment with the stop portion 209 of its respective latch 201. The machine 20 is then ready for subsequent operation.

Assuming again the initial setting of the machine as described, if eleven stamps are desired, the blade select-

ing key 221 is depressed. This preconditions the associated latch 201 for release of the main row selecting bracket 121. When the latter bracket does move, it abuts the depressed key 221 and causes the feed roller to rotate an amount sufficient to motivate a single transverse row 41 of stamps 40 across the cutter plate 68. The blade selecting key 245 is also depressed to move the blade 87 into opposed relation to the cutter plate. When the cutter plate is moved toward the drum as above described, the blade cuts eleven stamps in a single unitary strip in a manner now believed apparent.

Assuming a still different set of circumstances, the stamp machine 20 is capable of compensating for a row of stamps from which a portion of the stamps have been severed by a previous operation. That is, even when the leading edge of the sheet of stamps is L-shaped instead of straight, depression of the same key or keys as when the sheet is straight will dispense the same amount of stamps. For example, considering the condition of the machine after a single stamp has been dispensed as first described above, let it be assumed that five stamps are now desired. The blade selecting key 249 is depressed. In a manner now believed understood, this causes rotation of the cutter drum 81 by five divisions or blade distances. Since the drum is positioned, however, with blade 87 initially facing the cutter plate, the fifth blade counting in a clockwise direction, as viewed in Fig. 3, from blade 87 is blade 92. This blade is designed to cut six stamps from the sheet of stamps having intermediate transverse portion 99 spaced six stamp widths from the end 82 of the drum. Since one stamp has already been removed from the first row 41 of the stamps, however, only five stamps will actually be dispensed downwardly along the chute 29. It is to be noted that in this case the feed roller 50 is not rotated at all since the peg 110 does not engage the bell crank 160 nor is the main row selecting bracket 121 moved by reason of depression of any of the row selecting keys 221 to 230, inclusive.

Additional sets of circumstances could be assumed to show how various combinations of stamps could be obtained. It is believed, however, that the foregoing serve as sufficient examples to show that selected numbers of stamps corresponding to selected keys depressed can be obtained.

In this connection it is to be understood that the invention is not limited to the precise number of keys shown and described nor to the number and arrangement of stamps in a sheet. Further, it is not intended to limit the invention to the exact shape of the blades and stamps employed. It is believed readily apparent that the principle of the invention would be effective with various other equivalent structures which will be apparent to those skilled in the art.

From the foregoing, it will be understood that a highly effective machine has been provided for severing and dispensing selectable predetermined numbers of stamps from a sheet. The invention has particular utility in the dispensing of trading stamps by merchandisers although it is by no means limited to such an application.

Although the invention has been herein shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices and apparatus.

Having described our invention, what we claim as new and desire to secure by Letters Patent is:

1. An apparatus for cutting a predetermined number of stamps of uniform length and width from a sheet of such stamps arranged with the stamps in rows longitudinally and transversely of the sheet comprising a support, a plurality of elongated blades having a length as long as the width of the sheet of stamps, one of the blades being substantially straight and being adapted to sever the sheet between a pair of adjacent transverse rows when brought into engagement with the sheet, the rest of the blades having a pair of longitudinal end portions spaced a stamp's length apart adapted to sever the sheet on opposite sides of a transverse row of stamps and intermediate transverse portions interconnecting the longitudinal portions adapted to sever the sheet between a pair of adjacent stamps in a transverse row of stamps, said rest of the blades having their intermediate transverse portions differently spaced from opposite ends of the blades, said spacing of the intermediate portions in the different blades corresponding to a stamp's width and predetermined multiples thereof, a cutter plate mounted in the support, means mounted in the support mounting the blades for movement individually into opposed relation to the cutter plate, means in the support engaging the mounting means for selectably positioning the blades into opposed relation to the plate, and means mounted in the support for motivating the sheet between the blade selecting and the cutter plate, the cutter plate and blade mounting means being respectively movable toward and away from each other to bring the sheet of stamps into engagement with the blade selected.

2. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps arranged in rows transversely of the sheet comprising a support, a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support, a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in said sheet, a cutting plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to one of the blades, means engaging the drum for rotating it in predetermined amounts to bring selected blades individually into opposed relation to the plate, means mounting the sheet of stamps in the support for travel between the cutting plate and the drum in a direction substantially normal to said transverse rows, means for advancing a predetermined number of rows of the sheet in said direction, and means engaging the cutting plate for urging it toward the drum to bring the sheet into engagement with a selected blade to cut a predetermined number of stamps from the sheet.

3. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps arranged in rows transversely of the sheet comprising a support, a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support, a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in said sheet, a cutting plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to one of the blades, means engaging the drum for rotating it in predetermined amounts to bring selected blades individually into opposed relation to the plate, means mounting the sheet of stamps in the support for travel between the cutting plate and the drum in a direction substantially normal to said transverse rows, means for advancing a predetermined number of rows of the sheet in said direction, auxiliary means responsive to predetermined rotation of the drum for advancing an additional predetermined number of rows of the sheet in said direction, and means engaging the cutting plate for urging it toward the drum to bring the sheet into engagement with a selected blade to cut a predetermined number of stamps from the sheet.

4. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps arranged in rows longitudinally and transversely of the sheet which are delineated by lines also extended longitudinally and

transversely of the sheet comprising a support, a cutter drum mounted in the support for rotation about a predetermined axis having an outer surface circumscribing the axis, a plurality of cutter blades substantially radially outwardly extended from the surface of the drum in circumferentially spaced relation therearound, one of the blades being substantially straight and extended longitudinally of the drum, the rest of the blades being substantially Z-shaped having circumferentially spaced longitudinally extended end portions interconnected by intermediate transversely extended portions in longitudinally spaced staggered relation circumferentially of the drum, with the transverse portions of adjacent Z-shaped blades being spaced by substantially the width of a stamp and with adjacent longitudinal portions being spaced by substantially the length of a stamp, a cutting plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to one of the blades, means engaging the drum for controlled rotation thereof to bring selected blades individually into opposed relation to the plate, means mounting the sheet of stamps in the support for travel between the cutting plate and the drum in a direction substantially normal to said transverse rows, means for advancing a predetermined number of transverse rows of the sheet in said direction with the longitudinal and transverse lines delineating the stamps in opposed relation to the longitudinal and transverse portions, respectively, of the blade selected when the sheet of stamps is stopped, and means engaging the cutting plate for urging it toward the drum to bring the sheet into engagement with a selected blade to cut a predetermined number of stamps from the sheet.

5. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps arranged in rows transversely of the sheet comprising a support, a stamp drum rotatably mounted in the support adapted to receive such a sheet of stamps in wound condition thereabout, a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support, a plurality of blades outwardly extended from the blade mounting drum in circumferentially spaced relation and having shapes individually adapted to cut predetermined numbers of stamps from a row thereof in said sheet, a cutting plate mounted in the support adjacent to the blade mounting drum for movement toward and away from the blade mounting drum in opposed relation to a blade thereon, means engaging the blade mounting drum for rotating it in predetermined amounts to bring selected blades individually into opposed relation to the plate, means for engaging the sheet of stamps to unwind the sheet from the stamp drum and to advance a predetermined number of rows between the cutter plate and the cutter drum, and means engaging the cutting plate for urging it toward the drum to bring the sheet into engagement with a selected blade to cut a predetermined number of stamps from the sheet.

6. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in such a sheet; a cutter plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to a blade facing the plate; means for motivating a sheet of stamps in a direction normal to the rows of stamps between the cutter plate and the drum; a plurality of row selecting keys mounted in the support for individual movement between a depressed position and a retracted position; a row selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed row selecting keys and having driving connection to the sheet motivating means to move the sheet between the cutter plate and the drum a predetermined number of rows corresponding to the key depressed; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed blade selecting keys and having driving connection to the drum for rotating the drum to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; a cutter plate depressing arm mounted for pivotal movement in the support between a retracted position and an operating position urging the cutter plate toward the drum thereby to press the sheet of stamps against the blade selected; and drive means mounted in the support connected to the brackets and the arm for moving the brackets and the arm from their retracted to their operating positions.

7. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in such a sheet; a cutter plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to a blade facing the plate; means for motivating a sheet of stamps in a direction normal to the rows of stamps between the cutter plate and the drum; a plurality of aligned rows selecting keys mounted in the support for individual movement between depressed and retracted positions; a mounting shaft positioned in the support; a main row selecting bracket mounted on the shaft for pivotal movement including an arm generally radially extended from the shaft, a key engaging shift plate pivotally connected to the arm for pivotal movement around an axis substantially normal to the shaft having main and auxiliary radially disposed key engaging surfaces in angularly spaced relation relative to the shaft, the shift plate being pivotal between a normal position with the main key engaging surface aligned with the row selecting keys and a laterally shifted position with the auxiliary key engaging surface aligned with the row selecting keys, the main bracket being pivotal between operating positions with either of the key engaging surfaces abutting selectively depressed row selecting keys and a retracted position; means mounted on the arm of the main row selecting bracket urging the shift plate into said normal position; means connecting the row selecting bracket to the sheet motivating means for moving a predetermined number of rows of the sheet between the cutter plate and the drum incident to predetermined pivotal movement of the row selecting bracket; an auxiliary row selecting bracket mounted for pivotal movement on the shaft adjacent to the main bracket and for movement toward the main bracket to engage and to urge the shift plate into laterally shifted position and away from the main bracket to permit the shift plate to move back to normal position, means associated with the mounting drum engaging the auxiliary bracket incident to predetermined rotation of the drum to pivot the auxiliary bracket and to slide it toward the main bracket; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement on the shaft between a retracted position and the operating positions individually abutting selectively depressed blade selecting keys and having driving connection to the drum for rotating

the drum incident to pivotal movement thereof to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; a cutter plate depressing arm mounted for pivotal movement on the shaft between a retracted position and an operating position urging the cutter plate toward the drum; and drive means mounted in the support and connected to the brackets and the arm for moving the brackets and the arm from their retracted positions to their operating positions whereby a predetermined number of stamps are cut from the sheet.

8. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a sheet; a cutter plate mounted in the support adjacent to the blade mounting drum for movement toward and away from such drum in opposed relation to a blade facing the plate; a stamp drum rotatably mounted in the support adapted to receive a sheet of stamps wound therearound in a roll; a feed roller mounted for rotation in the support in spaced relation to the stamp drum; the guide roller mounted for rotation in the support in closely adjacent spaced relation to the feed roller, the sheet of stamps being placed between the rollers and between the cutter plate and the blade drum and being frictionally engaged by the rollers for motivation between the cutter plate and the blade drum incident to rotation of the feed roller; a plurality of row selecting keys mounted in the support for individual movement between a depressed and retracted positions; a row selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectably depressed row selecting keys and having driving connection to the feed roller to move the sheet between the cutter plate and the blade drum a predetermined number of rows corresponding to the row selecting key depressed; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectably depressed blade selecting keys and having driving connection to the blade drum for rotating such drum to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; a cutter plate depressing arm mounted for pivotal movement in the support between a retracted position and an operating position urging the cutter plate toward the blade drum thereby to press the sheet of stamps against a blade selected; and drive means mounted in the support and connected to the brackets and the arm for moving the brackets and the arm from their retracted to their operating positions.

9. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in such a sheet; a cutter plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to a blade facing the plate; means for motivating a sheet of stamps in a direction normal to the rows of stamps between the cutter plate and the drum; a plurality of row selecting keys mounted in the support for individual movement between a depressed position and a retracted position; a row selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed row selecting keys and having driving connection to the sheet motivating means to move the sheet between the cutter plate and the drum a predetermined number of rows corresponding to the key depressed; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed blade selecting keys and having driving connection to the drum for rotating the drum to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; latches pivotally mounted in the support for movement between positions individually engaging the brackets to hold them retracted and positions releasing the brackets for movement to their operating positions; means mounted in the support individually associated with the row selecting and the blade selecting keys movable between positions individually engaging the latches to hold the latches in positions engaging the brackets and positions disengaged from the latches to permit release thereof, said latch engaging means being movable to release the latches upon depression of any one of their respectively associated keys; a cutter plate depressing arm mounted for pivotal movement in the support between a retracted position and an operating position urging the cutter plate toward the drum thereby to press the sheet of stamps against the blade selected; and means mounted in the support connected to the brackets and the arm for controllably moving the brackets and the arm between their retracted and their operating positions.

10. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in such a sheet; a cutter plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to a blade facing the plate; means for motivating a sheet of stamps in a direction normal to the rows of stamps between the cutter plate and the drum; a plurality of row selecting keys mounted in the support for individual movement between a depressed position and a retracted position; a row selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed row selecting keys and having driving connection to the sheet motivating means to move the sheet between the cutter plate and the drum a predetermined number of rows corresponding to the key depressed; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed blade selecting keys and having driving connection to the drum for rotating the drum to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; springs mounted in the support individually urging the keys into retracted positions; latches pivotally mounted in the support for movement between positions individually engaging the brackets to hold them in retracted positions and positions releasing the brackets for movement to their operating positions; key locking and latch releasing bars individually mounted in the support below the row selecting and the blade selecting keys for longitudinal slidable movement between positions in-

dividually engaging the latches to hold the latches in positions engaging the brackets and positions locking their respectively associated keys in depressed positions while releasing their relatively associated latches, the bars being urged toward and held in locking and releasing positions by depression of their respectively associated keys; means yieldably urging the bars toward positions engaging the latches; a cutter plate depressing arm mounted for pivotal movement in the support between a retracted position and an operating position urging the cutter plate toward the drum thereby to press the sheet of stamps against the blade selected; drive means mounted in the support connected to the brackets and the arm for moving the brackets and the arm from their retracted to their operating positions; and means mounted in the support operable to move the locking and latch releasing bars to release keys held in depressed position thereby and to enable return of the bars to positions engaging the latches incident to return of the cutter plate depressing arm to retracted position from its operating position.

11. An apparatus for cutting a predetermined number of stamps from an elongated sheet of stamps wherein the stamps are arranged in rows transversely of the sheet comprising a support; a substantially cylindrical blade mounting drum mounted for rotation about a concentric axis in the support; a plurality of blades outwardly extended from the drum in circumferentially spaced relation and having shapes individually adapted to cut a different number of stamps from a row thereof in such a sheet; a cutter plate mounted in the support adjacent to the drum for movement toward and away from the drum in opposed relation to a blade facing the plate; means for motivating a sheet of stamps in a direction normal to the rows of stamps between the cutter plate and the drum; a plurality of row selecting keys mounted in the support for individual movement between a depressed position and a retracted position; a row selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed row selecting keys and having driving connection to the sheet motivating means to move the sheet between the cutter plate and the drum a predetermined number of rows corresponding to the

key depressed; a plurality of blade selecting keys mounted in the support for individual movement between depressed and retracted positions; a blade selecting bracket mounted for pivotal movement in the support between a retracted position and operating positions individually abutting selectively depressed blade selecting keys and having driving connection to the drum for rotating the drum to bring a blade corresponding to the blade selecting key depressed into opposed relation to the cutter plate; a cutter plate depressing arm mounted for pivotal movement in the support between a retracted position and an operating position urging the cutter plate toward the drum thereby to press the sheet of stamps against the blade selected; return tension springs interconnecting the brackets and the arm and the support for urging the brackets and arm into retracted positions; a reel rotatably mounted in the support, a plurality of cables connected to the reel and adapted to be wound thereabout incident to rotation of the reel; tension springs individually interconnecting the row selecting and the blade selecting brackets and a pair of the cables, another of the cables being directly connected to the depressing arm; electrically actuated drive means connected to the reel for imparting predetermined rotation thereto to wind the cables therearound so as to apply forces to the cables tending to urge their respective brackets and depressing arm toward operating positions; an electrical circuit connected to the drive means and including means for supplying electrical energy, a switch for energizing the drive means and a switch for de-energizing the drive means; and a stamp dispense button mounted in the support for movement between a position operating said switch to energize the drive means, said de-energizing switch being operated by the depressing arm in its operating position to de-energize the drive means to permit the cables to be unwound from the reel.

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