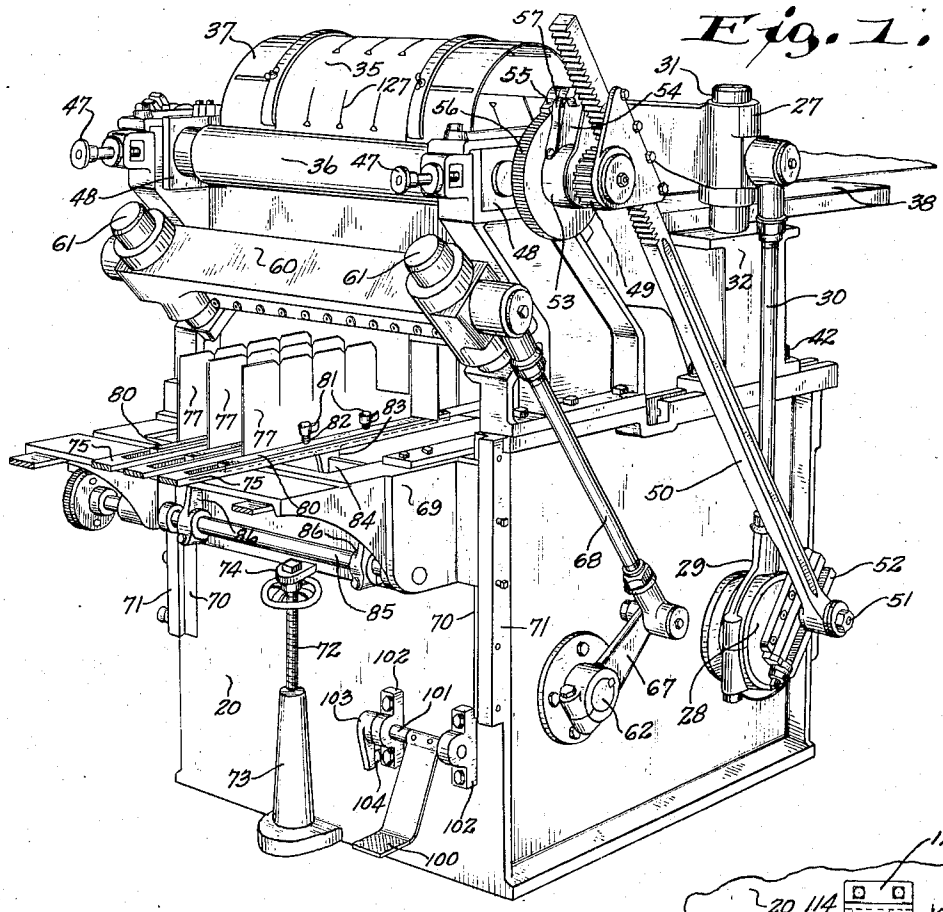
June 27, 1939. D. R. VAIL ET AL 2,163,923

PARTITION FABRICATING MACHINE

Filed Feb. 11, 1938 3 Sheets-Sheet 1

Fig. 1.



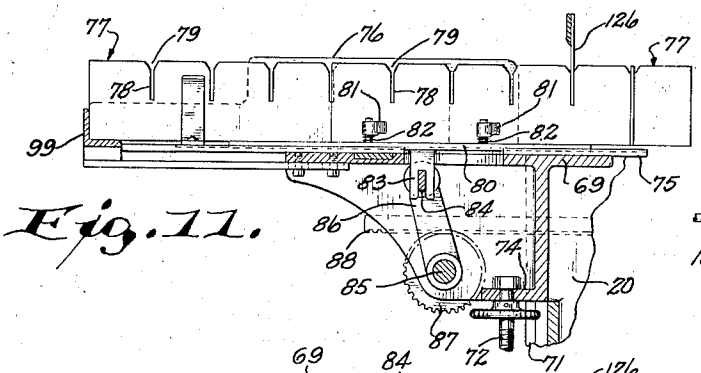


Fig. 11.

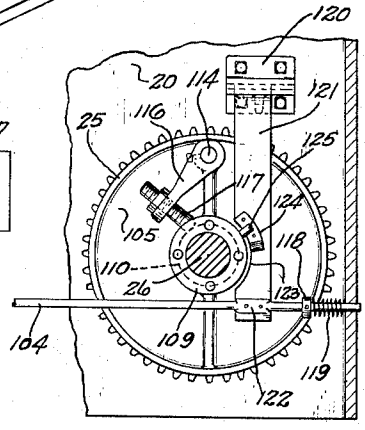


Fig. 10.

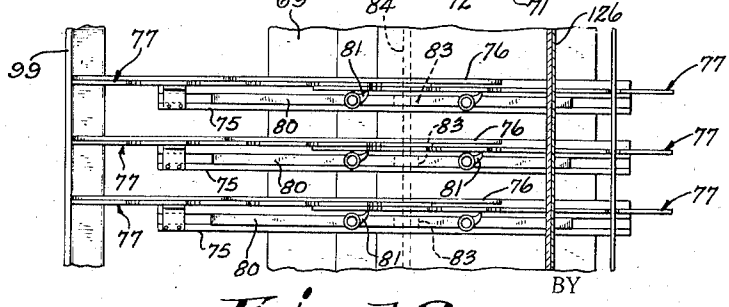


Fig. 12.

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PARTITION FABRICATING MACHINE

Filed Feb. 11, 1938 3 Sheets-Sheet 2

Fig. 2.

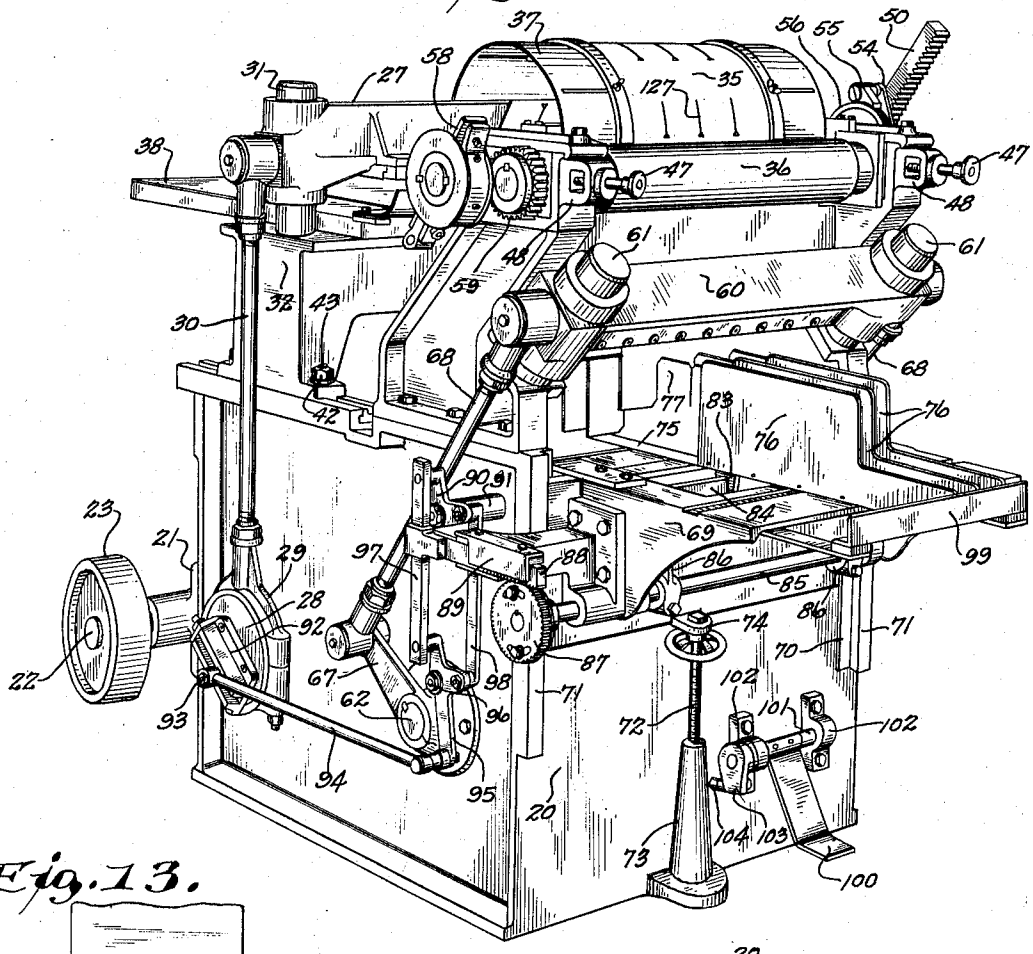


Fig. 13.

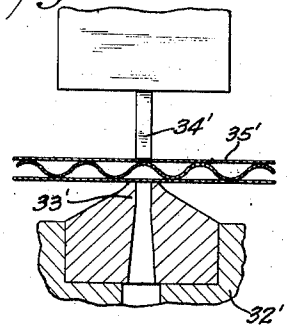


Fig. 5.

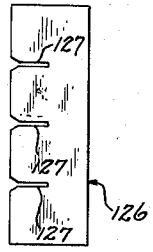
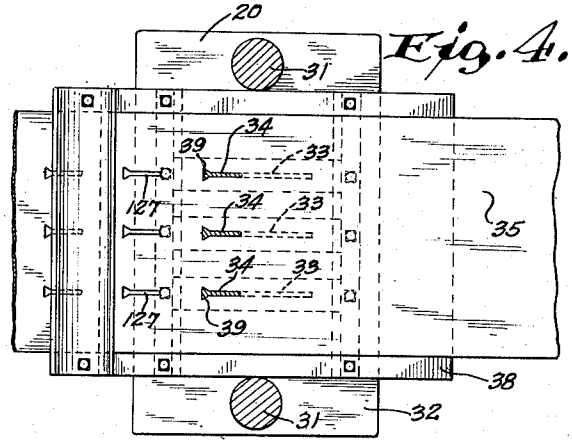


Fig. 4.



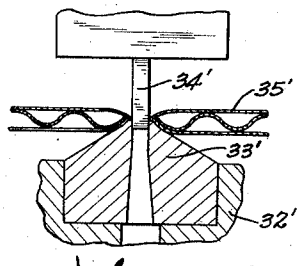


Fig. 14.

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PARTITION FABRICATING MACHINE

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Fig. 6.

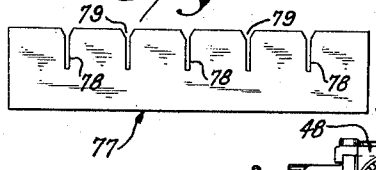


Fig. 3.

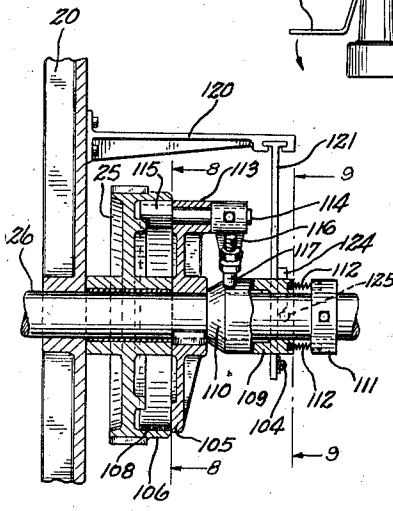


Fig. 7.

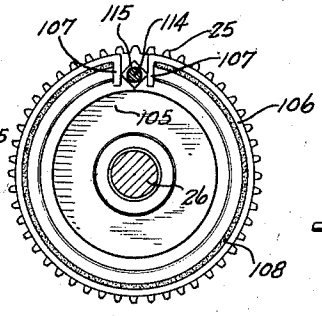


Fig. 8.

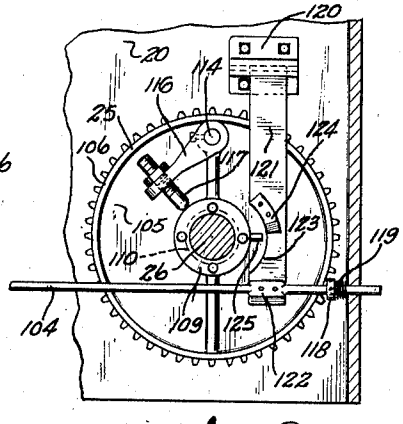


Fig. 9.

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UNITED STATES PATENT OFFICE

2,163,923

PARTITION FABRICATING MACHINE

Daniel Railing Vail, Wilmette, Ill., and Charles G. Dauber, Oshkosh, Wis.

Application February 11, 1938, Serial No. 189,964

9 Claims. (Cl. 93—37)

This invention relates to improvements in partition fabricating machines, and more particularly to machines for fabricating paper board partitions of the type employed in beverage cartons, glassware cartons, and other types of cartons wherein individual pockets are required.

A general object of the invention is to provide a machine which will automatically and expeditiously slot and cut carton partitions from an endless sheet of paper board material, and thereafter automatically assemble one set of partitions, as they are being formed, with another set of preformed partitions.

A further object of the invention is to provide a partition fabricating machine which can be adjusted or selectively regulated so as to produce partition strips of any desired length and height, and with slots of a desired depth and spacing arrangement.

A further object of the invention is to provde a partition fabricating machine which continuously forms one set of cut and slotted partitions and successively feeds said partitions into position for assembly while partitions of another and previously formed set are being fed into the machine in vertical disposition to be engaged and assembled with the first mentioned partitions.

A further object of the invention is to provide a partition fabricating machine of the class described having interchangeable punches whereby the machine may operate to advantage on different types of paper board material, including corrugated board, and whereby slots of different depths or lengths may be formed in the stock.

A further object of the invention is to provide, in a partition fabricating machine, means for feeding and advancing the partition material with a minimum of crushing to the material.

A further object of the invention is to provide a machine of the character described which can operate to slot and sever strips of partition material, or which can operate on continuous or intermittently fed sheets of said material.

A further object of the invention is to provide a machine of the class described which can be operated to only slot and sever partition forming material, or which can, in addition, assemble partitions thus formed with other formed partitions.

A further object of the invention is to provide a carton partition fabricating machine which is susceptible of being used advantageously for single or multiple operations, which is automatic and expeditious in its operation, which is strong and durable, and which is well adapted for the purposes set forth.

With the above and other objects in view, the invention consists of the improved partition fabricating machine, and its parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawings in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a perspective view of the improved partition fabricating machine showing the front and one side thereof;

Fig. 2 is another perspective view of the machine as viewed from the front and the other side thereof;

Fig. 3 is a longitudinal vertical sectional view of the machine;

Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 3;

Fig. 5 is a detail view of a partition strip as formed by the machine;

Fig. 6 is a detail view of a partition strip of the type fed into the machine for assembly with the strips being formed therein of the type shown in Fig. 5;

Fig. 7 is a detail sectional view of the clutch and control mechanism taken on line 7—7 of Fig. 3 only with the clutch engaged and the mechanism driving;

Fig. 8 is a sectional view taken on line 8—8 of Fig. 7;

Fig. 9 is a sectional view taken on line 9—9 of Fig. 7;

Fig. 10 is a sectional view similar to Fig. 9 only showing positions of the mechanism when the clutch is disengaged for idling;

Fig. 11 is a fragmentary side view, partly in section, of the forward table portion of the machine showing the means for feeding thereinto one class of formed partitions for assembly with the other class of partitions being formed and positioned by the machine;

Fig. 12 is a plan view of the showing in Fig. 11; and

Figs. 13 and 14 are fragmentary, detail sectional views showing a form of replaceable punch and die for use in the machine for the slotting of corrugated board partitions.

Referring now more particularly to the drawings, it will appear that the improved carton partition fabricating machine includes a box-like base or casing 20 having mounted therein and thereon many of the working parts of the machine. The lower portion of the base also sup-

ports suitable bearing brackets 21 in which is journaled a main drive shaft 22 of the machine. One end portion of said shaft has fast thereon a pulley wheel 23 whereby said shaft receives its motion from any suitable source of power (not shown). Also fast on said drive shaft 22 is a small gear 24 meshing with a larger gear 25 on another transverse shaft 26, and releasably engageable therewith by clutch means later to be described, whereby said shaft 26, when engaged, is driven at a reduced rate of speed. In addition to other mechanisms operated from the shaft 26, said shaft serves to reciprocate a punch head 27 vertically. For this purpose outer portions of the shaft 26 have fast thereon eccentrics or cams 28. Each of said cams turns eccentrically within a strap or frame member 29, and turning movements of said cams therewithin serve to raise and lower the members 29 which have secured thereto the lower ends of reciprocating rods 30. The upper ends of said rods are attached to opposite sides of the punch head 27, and the punch head is guided in its vertical reciprocations by guide posts 31.

Mounted on the rear upper portion of the casing is a table 32 whose top face, at its opposite side portions, is arranged with the guide posts 31 previously mentioned. Hence the punch head extends above the top of said table and is adapted to move vertically with respect thereto. The top of said table has incorporated therein cutting dies 33 of considerably greater length than that of any punches to be used therewith. A plurality of punches, designated by the numerals 34, are removably depended from the punch head 27, and the length of each punch corresponds with the length of the slots to be cut in the paper board material being fed into the machine.

An extent of paper board material is indicated by the numeral 35, and it will be noted that just prior to severance into strips it is engaged between feed rollers 36 which operate to advance the material 35 from the source. Said material also extends over an adjustable apron 37 and is disposed in a flat, taut condition over the top of the table 32 and over the dies 33. The material 35 may be in suitable sized strips or sheets fed into the machine via a supporting surface 38, or it may be extended into the machine over said surface in continuous, unbroken condition from any source, as a roll.

Referring again to the punches 34 it should be observed that interchangeable punches are utilized and one set may be removed from the head and be replaced by longer or shorter punches, depending on the length of slots desired in the partitions. Due to the oversized dies the latter need not be changed when the punches are changed. Said punches, as well as the dies, are formed with enlarged ends 39 which serve to cut enlarged V-shaped ends in the slots in the stock which are of advantage during connection of one set of partitions with another set, following severance.

In Figs. 13 and 14 there is illustrated a modification in the form of punch 34' and die 33' especially advantageous when the sheet material being operated on is corrugated board 35'. In die cutting corrugated board care must be taken to not damage any substantial area of the board by crushing the corrugations and by cracking. In the arrangement of Figs. 13 and 14, this objection is obviated due to the local built-up portions of the dies and the specific shape of the dies and punches so that crushing takes place in very limited areas which can, by the corrugations, again flex and expand after the operations.

In connection with work on crushable sheet material such as corrugated board, it is to be further noted that such material is delicately handled by the present machine wherein it will be observed that the feed rollers 36 are resilient, having an exterior jacket of yielding rubber or the like, as at 40.

Suitably movably mounted in the forward portion of the machine is a strip severing knife 41. In setting up the machine for a given operation, in addition to the speed and synchrony of operation of the various mechanisms, in order to assure correct widths of strips and correct disposition of the rows of slots therein, it is desirable to adjust the sheet distance as between the knife 41 and the punches 34. Main adjustments are accomplished by moving the table 32 fore or aft, this being done by releasing securing nuts 42 whereby the heads of attaching bolts 43 are free to slide longitudinally in T-slots 44. For minor and more accurate adjustments, the apron 37 may be flexed upwardly or downwardly a desired distance, this being accomplished by screwing upwardly or downwardly a supporting screw 45 turnable by a hand wheel 46.

The feed rollers 36 have their reduced end portions rotatably journaled in adjustable bearing blocks 48 at the forward end of the machine. The proximity of the outermost roller to the surface of its companion roller may be adjusted or varied by screw members 47 engaging the ends of said outermost roller and extended through the bearing blocks.

The means for positively driving one of the feed rollers is shown most clearly in Fig. 1 wherein it will appear that the innermost feed roller has one end extended beyond its bearing block and carries loose thereon a pinion 49 which meshes with the teeth of a rack bar 50. The lower end of the rack bar is pivotally mounted on a crank pin 51 which is adjustable in the slot of a guide block 52 secured to a face of one of the cams 28. Hence the driven feed roller receives its power from the shaft 26, and by adjusting the pin 51 longitudinally in the block 52, the amount of thrust or length of movement of the rack bar can be varied and controlled. It is essential that the feed rollers be intermittently turned in only one direction. The pinion 49, which is loose on the end of its feed roller, has secured thereto an inwardly extending collar 53 also loose on the roller. Said collar has a radial arm 54, to the outer end of which is pivotally mounted a pawl 55 adapted, when the arm 54 turns in one direction, to engage a tooth in a toothed wheel 56 fast on said roller, to turn said roller a suitable distance in one direction, this being accomplished while the rack bar 50 is moving upwardly. When the rack bar moves in the reverse direction, the pinion 49 and collar 53 turn freely on the roller end in the reverse direction and the pawl 55 slips over the teeth of the wheel 56 to a position where it takes a new bite when the rack bar is ready to advance. The pawl is yieldingly held in tooth engaging position by a band spring 57. Retrograde movement of said driven roller is prevented by a fraction brake 58 mounted on the opposite end portion of said roller. Said end portion of said roller also carries fast thereon a gear which meshes with a gear 59 on the forward roller,

whereby the forward roller is also positively, intermittently turned in one direction.

A knife frame, for holding the transversely extending knife 41, is indicated by the numeral 60. Said frame is reciprocally mounted at an angle at the forward portion of the casing 20, to slide on guide posts 61. The knife frame is reciprocated in synchrony with the other mechanisms of the machine and receives its power from the transverse shaft 26. It will be observed from the drawings that the lower portion of the casing 20 has journaled therein a forward, transverse shaft 62. This latter shaft is rocked through a crank 63 fast thereon which is connected with the end of an adjustable rod 64. The lower end of said rod is formed as a strap 65 in which turns an eccentric 66 fast on the shaft 26. The opposite outer end portions of the rack shaft 62 have cranks 67 fast thereon which are connected with the knife frame by adjustable rods 68.

At the forward end of the casing 20 there is a vertically adjustable strip feeding platform 69. The under-portion of said platform is provided, at its sides, with depending vertical rails 70 slidably received in vertical tracks 71 on the casing. The platform is held in a desired position of vertical adjustment by a screw 72 threaded into a base support 73 and engaging an under flange 74 on said platform. On said platform 69 there are a plurality of spaced-apart slotted strips 75. Against the side of each strip there is mounted in vertical position a partition supporting panel 76 (omitted in some of the views). Sets of preformed longitudinal partitions are adapted to be held in spaced, vertical disposition on the platform for intermittent feeding into the machine for assembly with the partitions being fabricated by the machine. One of said preformed partitions is shown in detail in Fig. 6, and is indicated by the numeral 77. It is a thin strip of paper board material of a suitable height and length, and is provided with spaced-apart slots 78 extending from its top edge to an intermediate portion of the partition with the slots being enlarged, as at 79, at the outer ends thereof. In actual practice in order to insure continuous feeding of partitions it is desirable to mount said partitions 77 so that with respect to each strip 75 and its supporting pawl 76, there is a partition 77 having its outer end overlapped by a subsequent partition, as best shown in Figs. 3, 10 and 12. The lower edges of the partitions, as thus disposed, rest on the stock of the respective strips 75 laterally of the slots in said strips.

Slidably mounted within the slot of each strip 75 is an advancing bar 80 of considerably less length than its slot. Each bar carries several yielding grippers 81, whose finger portions are urged by springs 82 into firm engagement with face portions of the supported partitions 77. Each bar 80 also carries a depending yoke 83 which straddles and is moved by a transverse connection 84. The transverse connection 84 is moved forwardly and rearwardly relative to the platform 69, to thereby move the bars 80 in their slotted strips 75 with resultant intermittent advancing movements of the partitions 77, by an upper, transverse rock shaft 85. Said rock shaft has fast thereon a pair of cranks 86 whose free ends are pivotally connected with a suitable portion of the connection 84. One end portion of the upper rock shaft 85 has fast thereon a pinion 87 meshing with the teeth of a longitudinal rack bar 88. Said rack bar is slidably supported in a suitable guide-way 89 mounted laterally of a side of the platform 69, and said rack bar is reciprocated by a bell-crank lever 90 pivotally mounted on a supporting post 91.

On the same side of the casing 20 (see Fig. 2) the eccentric 28 on the shaft 26 carries a guide block 92 in which is adjustably secured a crank pin 93. Pivotally mounted on said crank pin is one end of a crank rod 94. The other end of said crank rod is pivotally secured to the outer end of an arm of a lower bell-crank lever 95, pivotally mounted on a forward side portion of the casing, as at 96. Another arm of the bell-crank lever 95 is pivotally connected with one arm of the upper bell-crank lever 90 by a bar 97, while still another arm of the lower bell-crank lever 95 is pivotally connected with the other arm of the upper bell-crank lever 90 by a bar 98. Hence, through the mechanism described, the advancing bars 80 of the partition feeding platform are intermittently reciprocated forwardly and rearwardly. On the movements toward the machine the grippers 81 are effective to advance the engaged partitions a distance equal to the distance between slots therein. On the reverse movements of the bars 80 the grippers slide rearwardly on the faces of the partitions to take new holds or bites thereon and suitable means may be employed for holding the advanced partitions in their new positions and against rearward slippage. After the innermost partitions are sufficiently far advanced, the grippers will engage and commence moving the rear overlapping partitions and by inserting overlapping partitions from time to time the feeding can be kept continuous. The rear ends of the overlapping partitions can be gauged against an angle bar 99. This angle bar 99 can be movable longitudinally of the machine either manually or by suitable mechanical means.

Operation of the entire machine is controlled by an operator stationed at the front end thereof in a position to manipulate a foot pedal 100 with his foot. Said foot pedal is mounted fast on a rod 101 journaled in bearing brackets 102. One end portion of said rod carries fast thereon an arm 103 adapted to engage the projecting end of an elongated, longitudinal clutch controlling rod 104 which is yieldingly slidably mounted within the lower portion of the casing 20.

With particular reference to the clutch mechanism, attention is directed to Figs. 3, 7, 8 and 9 wherein it will be noted that the shaft 26 which is to be driven, when desired, freely carries the large gear 25. Keyed to said shaft adjacent the gear is a clutch disc 105. The face of the gear 25 adjacent the disc 105 is formed with an annular rib 106 interrupted by a pair of spaced, inturned, yielding flanges 107. The periphery of the disc is inwardly spaced from the rib 106 and between the rib 106 and said periphery there is a band 108 of friction material such as brake lining or the like.

Adjacent the outer face of the disc 105 there is splined on the shaft for longitudinal sliding and turning movements a cylindrical member 109 having a frustroconical inner end 110. Fast on said shaft and spaced from the other end of the member 109 is a collar 111. Springs 112 are interposed between the adjacent ends of the members 109 and 111 so as to resist movement of the member 109 in one direction. A peripheral portion of the disc 105 is provided with a bored boss 113 rotatably receiving a pin 114. One end portion of said pin has fast there-

on a squared block 115 to lodge in the space between the yielding flanges 107 in several positions. The other end portion of said pin has secured thereto the collar portion of an arm 116. The free end of said arm has adjustably extended there through a follower 117 to ride on either the cylindrical or the tapered portions of the member 109.

It will be noted that the inner end of the clutch controlling rod 104 is slidably extended into the rear wall of the casing 20. Near said extremity said rod carries a collar 118 to confine between it and the rear wall of the casing a coiled spring 119. Rearwardly of the shaft 26 an inner side wall portion of the casing carries a bracket 120 with a longitudinal slot therein which slidably receives the T-head of a vertical arm 121. The lower portion of said arm is affixed to the rod 104, as at 122, and the portion of the arm which is adjacent the cylindrical member 109 is recessed, as at 123, and a face portion thereof is also provided with a tapered, curved plate 124. Said plate is adapted to engage, under certain conditions, a pin 125 projecting radially from said member 109.

The operation of the clutch mechanism specifically described is as follows: When the operator does not depress the pedal 100 the machine will idle and this is the condition shown in Figs. 1, 2, 3 and 10, in which case, the spring 119 on the rod 104 urges said rod and the parts carried thereby forwardly or to the left relative to the drawings. Assuming that operation of the various mechanisms is desired, it is then necessary for the operator to depress the foot pedal 100, whereupon the controlling rod 104 will be pushed to the right, compressing the spring 119, as in Fig. 9. In the idling position previously mentioned, the pin 125 was engaged with the arm plate 124, as in Fig. 10, whereby the cylindrical member 109 was held in the shaft longitudinally to the right and spaced from the clutch disc and with the follower 117 riding on the tapered end 110. However, upon depression of the foot pedal and movement of the rod 104 to the right the arm 121, sliding in the bracket 120, will move so as to disengage the pin 125 from the raised plate 124. Therefore the springs 112 will then force the cylindrical member 109 to the left (relative to the drawings) on its shaft, and the follower 117, will then ride upon the high or cylindrical surface of the member 109. This change in the disposition of the follower will pivotally move the arm 116 and shaft 114 a sufficient distance so that the block 115 will assume the angular disposition of Fig. 8 to spread the ears 107 and thereby apply the clutch engagement between the members 25 and 105. Inasmuch as the gear 25 is continuously revolved by connection with the drive shaft 22, this driving force, when the clutch is applied, will be transmitted through the member 105 to the shaft 26 from whence the movements for the various mechanism previously described are derived.

The machine will operats as long as the foot pedal 100 is maintained in a depressed condition. If it is desired to stop the machine, or if the operator leaves it, the pedal 100 will be released and the rod 104 will automatically move to the position of Fig. 10. This movement of the rod moves the arm 121 so as to engage the pin 125 with the raised plate 124 to spread the cylindrical member 109 relative to the member 105 and causing the follower 117 to then drop onto the tapered surface 110. Then the block 115 will be turned so that its side edges are parallel with the yielding ears 107, and said ears will contract and spread the brake material 108 to disengage members 25 and 105 whereupon the drive will not be acting on the shaft 26.

Aside from the specific mode of controlling operation of the machine, as last described, the machine for the fabrication of partitions of predetermined sizes and compartments for cartons is susceptible of minute adjustments in a variety of ways. It is, of course, recognized that the slotting dies, the feed rollers, the strip severing knife, and the preformed partition feeding platform be arranged to perform their functions in perfect timed sequence. The various adjustments for attaining these desired ends have heretofore been described and are also obvious from the drawings.

In setting up the machine for a sequence of operations, it must of course be initially determined what size partitions are desired and it must be determined the depth of slots desired therein, the number of slots and the spacing arrangement between the slots of a series. Suitable punches for this purpose are then inserted in the punch head 27 and the partitions to be slotted and severed must correspond in these particulars with the same of the preformed partitions with which they are to be engaged, if the machine is to be used for the complete operations including assembly.

The sheet material 35 is positioned in the machine in the manner previously described and so that a forward extent of the same is engaged between the feed rollers 36. Thereupon the operator depresses the foot pedal 100 and by means of the clutch mechanism the shaft 26 is set into rotation. Through the rotation of the shaft 26 and the various connections associated therewith the mechanisms are set into operation in the proper timing relationship. The punch head 27 reciprocates to punch a transverse series of spaced slots in the sheet material while the feed rollers 36 are inactive. At the same time, if the sheet is sufficiently far progressed, the severing knife 41 will be reciprocated to cut the sheet transversely to form a finished transverse partition strip. During receding reciprocations of the punch and the severing knife, or while the same are inactive, the feed rollers become active to advance the sheet to a new position for the slotting of a rearward portion of the sheet and for the severing of an advanced strip portion thereof.

This sequence of operations takes place if the machine is used solely for the purpose of punching and severing partition forming strips from a sheet of material. The strips thus formed may provide the transverse partitions in a completed assembly and one of said strips is shown in detail in Fig. 5 and is represented by the numeral 126 with spaced slots 127 therein.

Considerably greater usefulness of the machine resides in its ability to not only punch and sever partitions but to also actually spaceably assemble the partitions as they are being formed with preformed partitions to provide complete carton interiors or dividers. When operated in the last mentioned manner, the preformed sets of partitions may be made on the machine in the manner last described, or they may be formed on another machine of a substantially similar character. However, during the formation of the new sets of partitions on the machine as described, the preformed partitions must be available, and the same are arranged on the partition feeding

platform 69 in vertical disposition and in spaced relationship in the manner previously described. As will be recalled, the feeding mechanism on said platform 69 operates to advance the partitions 77 intermittently and each stage of advancement is equal to the distance between slots therein, this being controlled and regulated by the adjustments in the mechanism for operating the feeding platform.

With the preformed partitions disposed on the platform as described, as each finished strip of the sheet material 35 advances to depending position, it is in vertical position and at right angles to the partitions 77, but its slots coincide with the partitions 77 as spaced, and one of each of the latter partitions slides into a slot 127 of the partition 126. By the time the depending end of the sheet material 35 has been completely severed by the knife 41 it is in fully lowered position and is then arranged so that its slots are in coincidence with the slots 78 of the preformed partitions 77 there adjacent. In this manner one completely formed and severed partition 126 is mounted in a correct position on a row of partitions 77 and thereafter as the feeding platform steppedly advances a new formed partition 126 will be associated with the series of partitions 77 at each row of slots 78.

When assembly of all of the partitions required by a set of partitions 77 has been made, one complete carton interior is thus formed and finished and the completed device then slides off on to an inclined gangway 128 and leaves the machine.

Since the preformed partitions 77 are kept advancing as previously described, in this manner operations relative to not only one box interior but to a plurality of the same is rendered continuous.

From the foregoing description, it will appear that the improved carton partition fabricating machine is of simple construction, operates automatically and is extremely expeditious, permits the formation of slotted partitions of any desired size, and furthermore, provides for the automatic assembly of one set of partitions with those of another set to provide complete carton interiors or subdividers. The machine is also of novel construction and is well adapted for the purposes described.

What is claimed as the invention is:

1. In a partition fabricating machine, in combination, sheet feeding rollers intermittently rotatable, intermittently and jointly operating reciprocable sheet slotting punches, an intermittently reciprocable knife to sever slotted portions of the sheet into partition strips, and means for supporting and spacedly feeding sets of established lengthed and previously formed partitions into assemblable relation with the first-mentioned partition strips.

2. In a partition fabricating machine, in combination, sheet feeding rollers intermittently rotatable, intermittently and jointly operating reciprocable sheet slotting punches, an intermittently reciprocable knife to sever slotted portions of the sheet into partition strips, means for supporting and spacedly feeding sets of completed, independent and previously formed partitions into assemblable relation with the first-mentioned partition strips, and controlled means for automatically operating all of said members in predetermined synchrony.

3. In a partition fabricating machine, a platform provided with means for spacedly supporting in parallel relationship a set of preformed partitions of established length, means associated with said platform for advancing said set of partitions simultaneously and in stages without bending or deflection as to planes, means for successively forming slotted, secondary partition strips from sheet material, and means for projecting the latter partitions as they are formed into successive transverse, spaced, interlocking engagement with the partitions of the first set.

4. In a partition fabricating machine, a platform provided with adjustable means for spacedly supporting in parallel relationship a set of preformed and severed partitions of established length, means associated with said platform for advancing said set of partitions simultaneously along rectilineal paths and in stages of a desired length, means for successively forming slotted, secondary partition strips from sheet material, and means for projecting the latter partitions as they are formed into successive transverse, spaced, interlocking engagement with the partitions of the first set.

5. In a partition fabricating machine, a platform provided with preformed partition supporting devices, said devices being arranged to receive and hold a plurality of severed and completed partitions in upright, spaced and parallel relationship, means connected to said supporting devices to simultaneously advance the partitions thereon in stages and without deflection, means for successively forming slotted, secondary partition strips from sheet material, and means for individually projecting the latter partitions into vertical positions in planes at right angles to and intersecting the planes of the first-mentioned partitions so that the secondary partitions are in successive, spaced, interlocking engagement with the partitions of the other set.

6. In a partition fabricating machine, a platform provided with preformed partition supporting devices, said devices being arranged to hold a plurality of severed and completed partitions in upright, spaced and parallel relationship, means connected to said supporting devices to simultaneously advance the partitions thereon in stages, means for successively forming slotted, secondary partition strips from sheet material, means for individually projecting the latter partitions into vertical positions in planes at right angles to and intersecting the planes of the first-mentioned partitions so that the secondary partitions are in successive, spaced, interlocking engagement with the partitions of the other set, a drive shaft rotating within the machine, and controlled connections between the drive shaft and all of said means for imparting motion thereto.

7. In a partition fabricating machine including means for successively forming and projecting transverse partition strips into assemblable positions, a vertically adjustable platform for spacedly supporting and feeding preformed partitions into engaged relation with the first-mentioned partition strips.

8. In a partition fabricating machine including means for successively forming and projecting transverse partition strips into assemblable positions, a platform for spacedly supporting and feeding preformed partitions into engaged relation with the first-mentioned partition strips, vertical supporting plates on said platform against which the preformed strips are slidably disposed, and reciprocating means on said platform for engaging and intermittently advancing said supported strips.

9. In a partition fabricating machine includ-

ing means for successively forming and projecting transverse partition strips into assemblable positions, a platform for spacedly supporting and feeding preformed partitions into engaged relation with the first-mentioned partition strips, vertical supporting plates on said platform against which the preformed strips are slidably disposed, and reciprocating means on said platform for engaging and intermittently advancing said supported strips, said reciprocating means including bars and yielding fingers carried by the bars, the fingers engaging the strips upon inward reciprocations of the bars and disengaging the strips upon outward reciprocations of the bars.

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