

Nov. 3, 1959

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2,911,213

ERROR CONTROL MECHANISM FOR STUFFING MACHINE

Filed Jan. 16, 1958

5 Sheets-Sheet 1

Fig. 1.

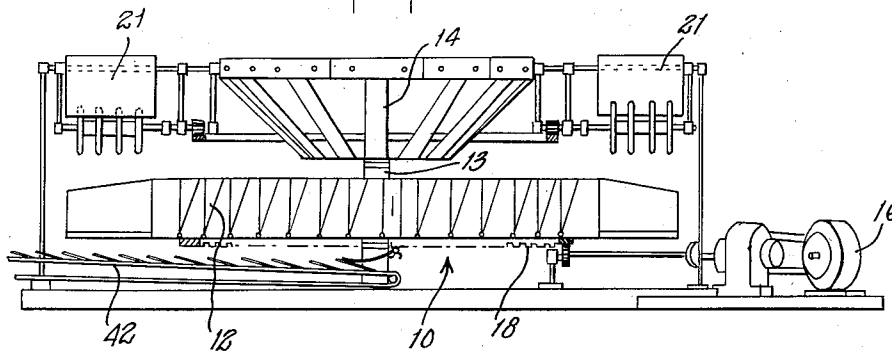


Fig. 2.

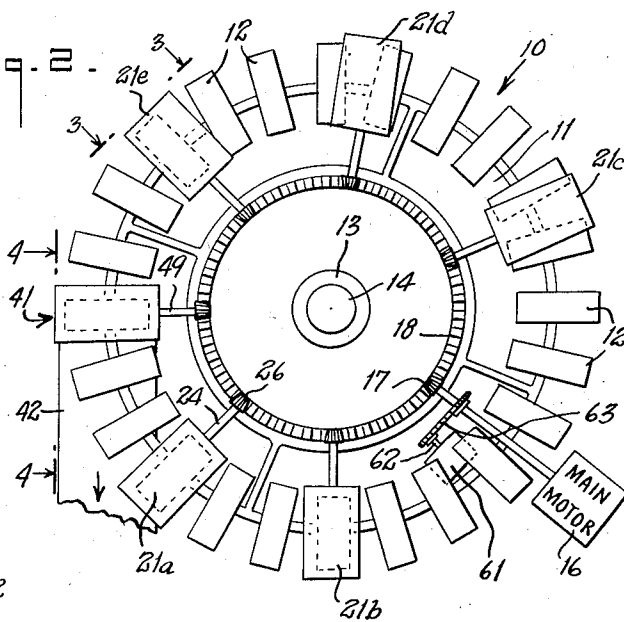


Fig. 3.

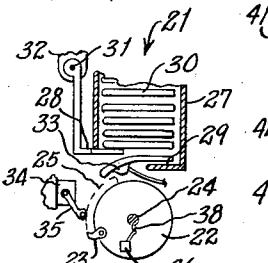


Fig. 4.

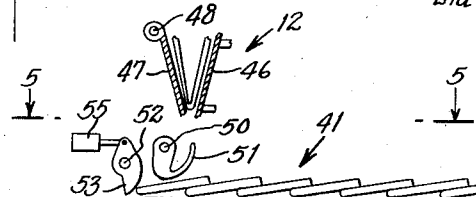
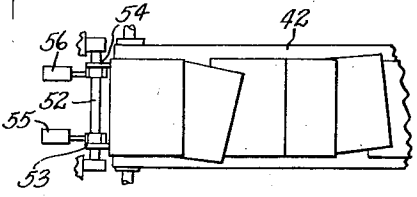


Fig. 5.



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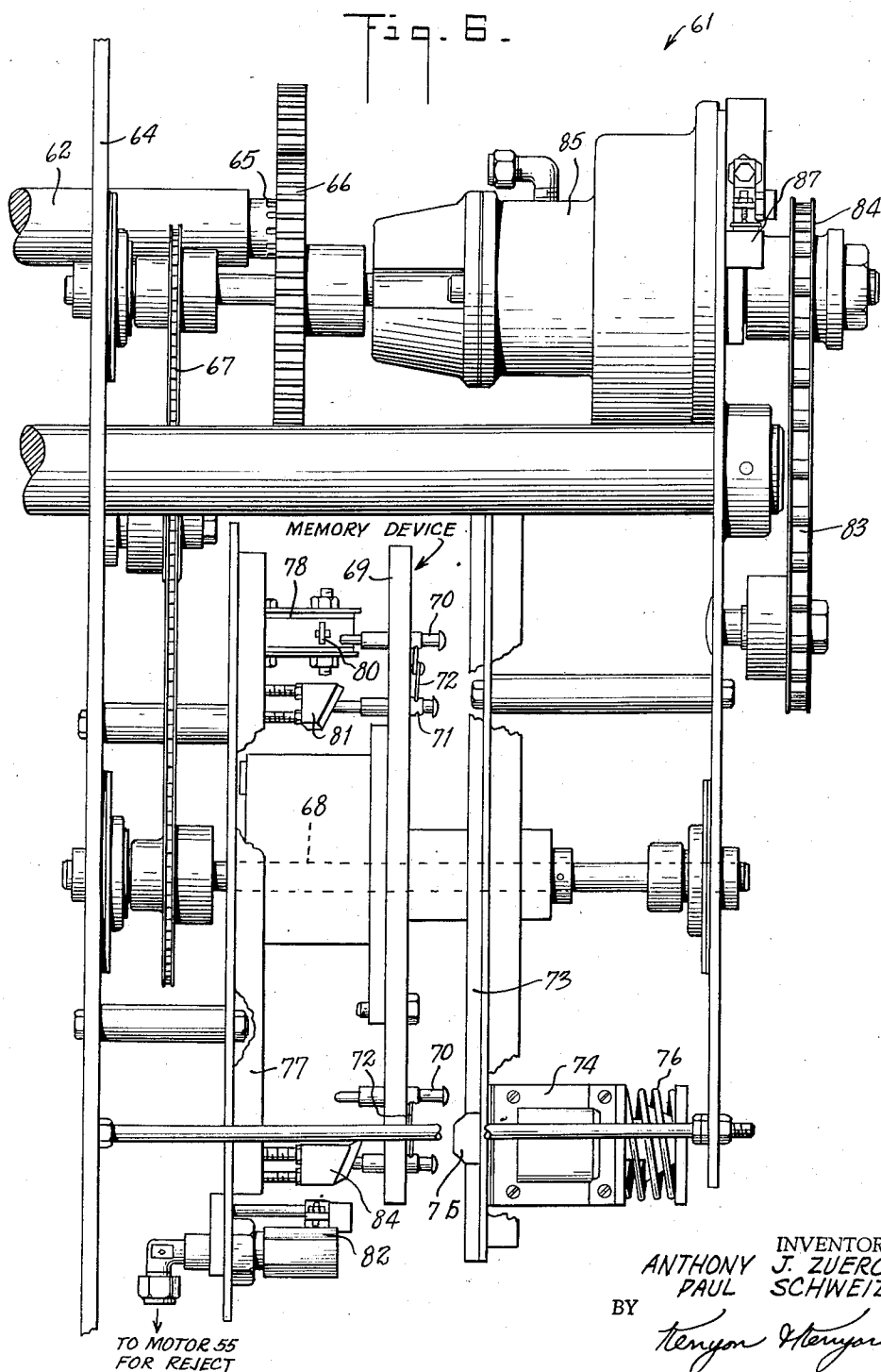
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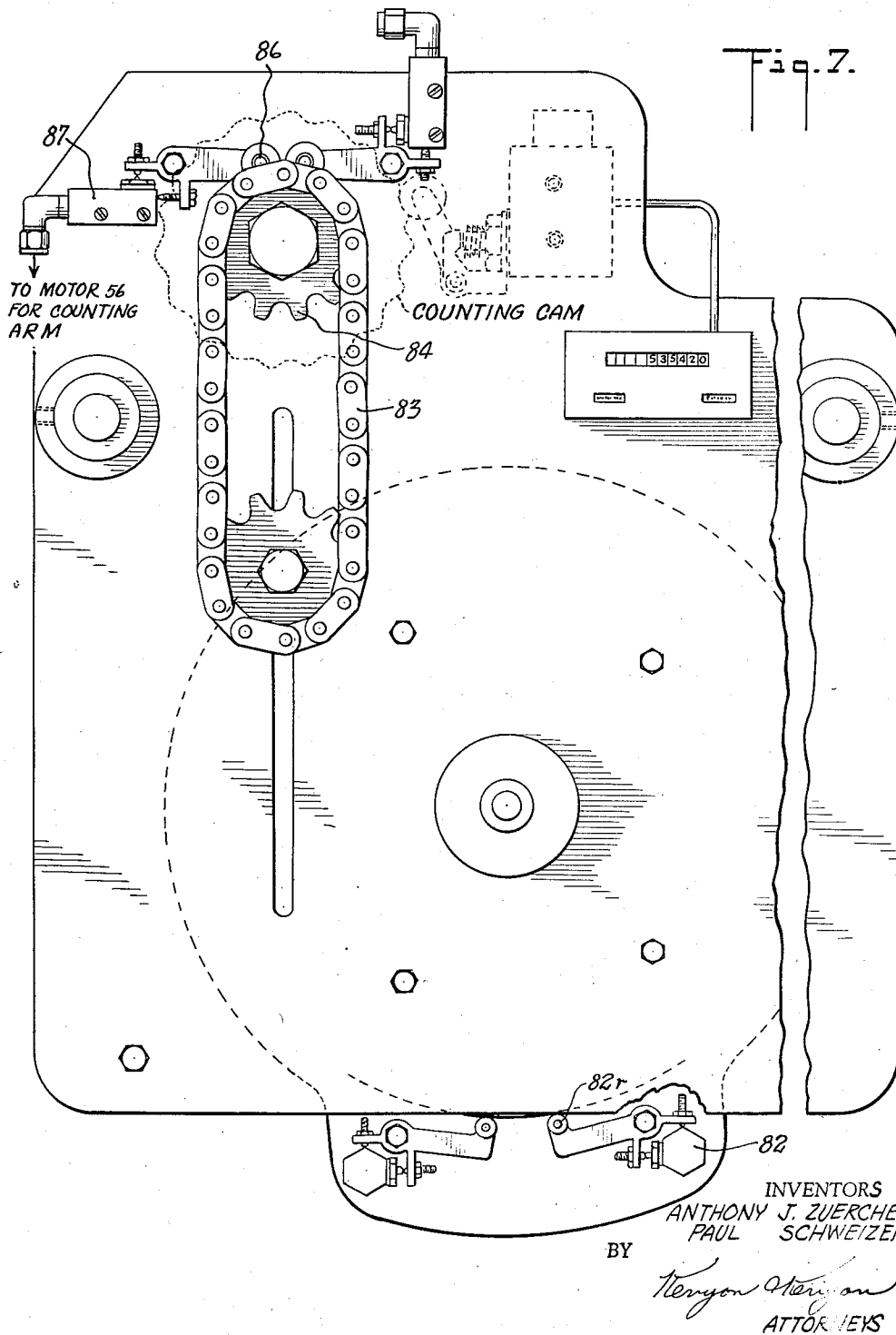
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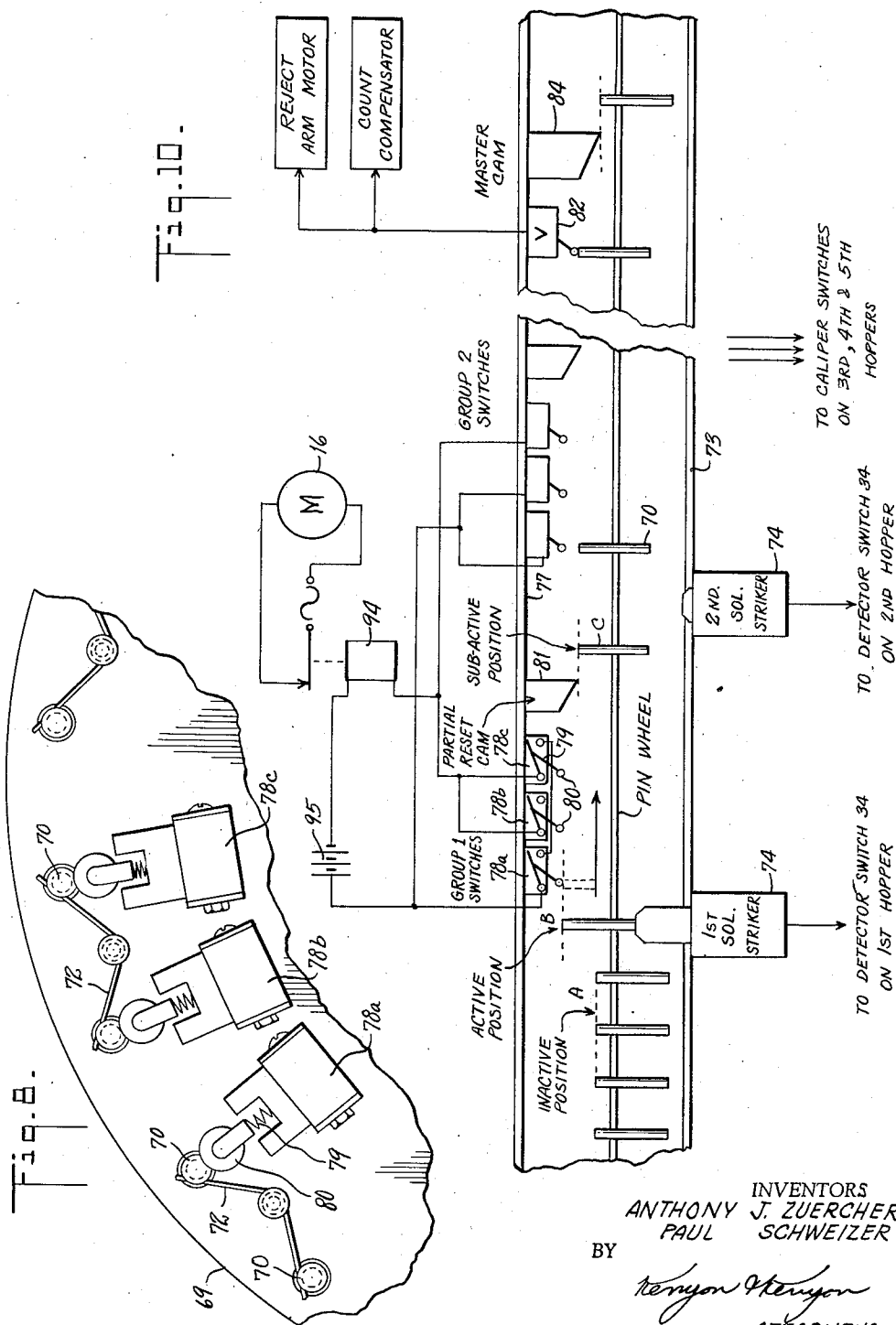
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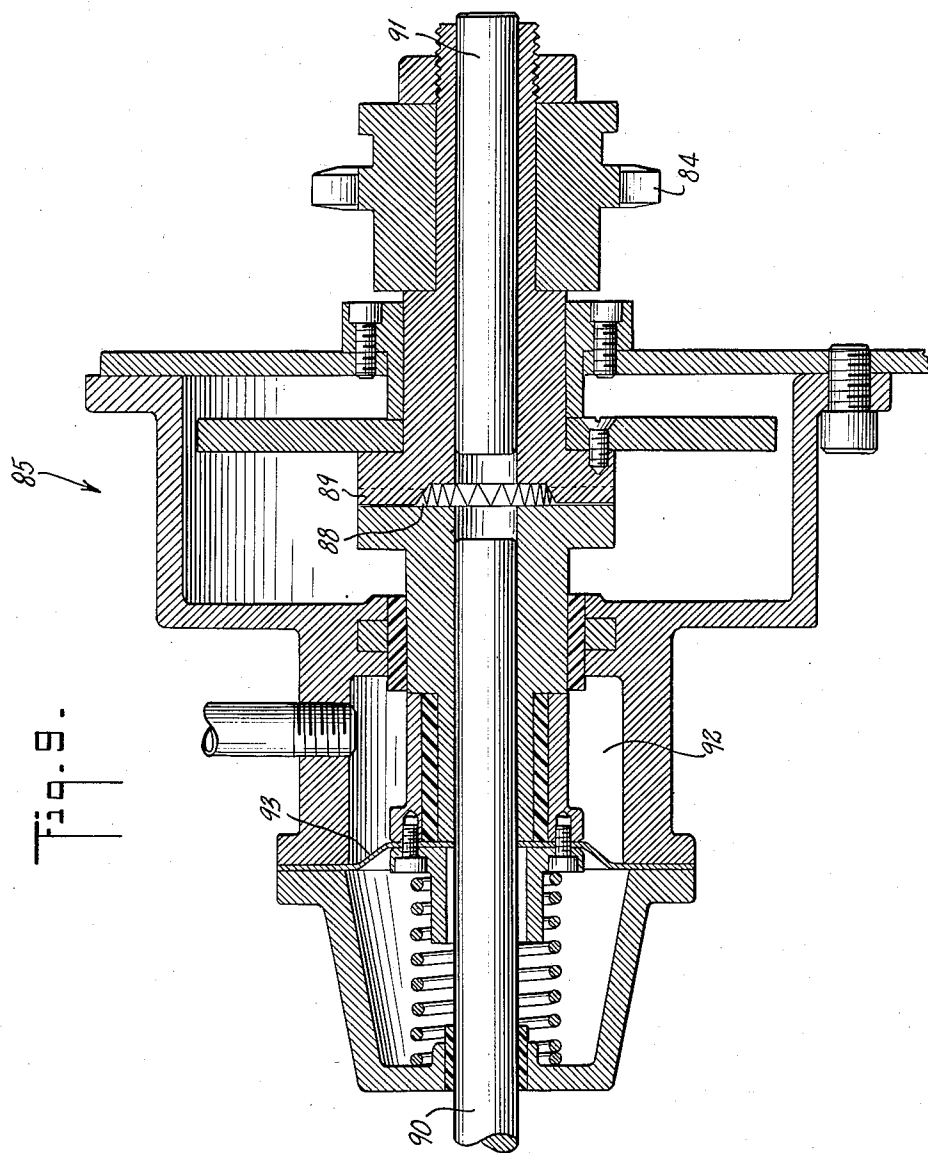
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ERROR CONTROL MECHANISM FOR STUFFING MACHINE

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## ERROR CONTROL MECHANISM FOR STUFFING MACHINE

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Application January 16, 1958, Serial No. 709,334

6 Claims. (Cl. 270—57)

The present invention relates generally to paper stuffing machines adapted to collate the folded sections of a newspaper into a complete assembly, and more particularly to an error analyzer and control mechanism for a stuffing machine to effect rejection of an erroneous assembly in the event of a faulty operation or "miss" in the course of stuffing and to effect shut-down of the machine if a consecutive series of errors occurs.

In assembling multi-section newspapers, it is known to make use of a stuffing machine, such as is disclosed in the patent to Schweizer No. 2,634,971, issued April 14, 1953, whereby the respective sections to be stuffed are stacked in hoppers at stationary feeding stations from which points they are automatically fed into moving pockets below. Arranged beneath the several feeding stations is a rotary turret consisting of an endless series of V-shaped pockets. The pockets are disposed in an upright position and are double acting so as to close and open alternately at top and bottom to receive the sections and to discharge the assembly. Each pocket receives the desired number of sections from the various feeding stations, thereby assembling one complete stuffed newspaper.

The cover section or jacket is assigned to the first feeding station and is the first section to be fed into a pocket. Suction means on the pocket act to open the outside jacket so that the remaining sections may be fed therein. The inside sections are assigned to the other feeding stations in the order of their assembly, and in that sequence enter into the outside jacket lying within the pocket. When the stuffing is completed, the pocket bottom opens to discharge the assembly and the newspaper is delivered onto a conveyor.

In the course of operation, one or more of the feeding stations may on occasion fail to deliver an insert into the pocket or else it may simultaneously feed more than one insert therein. Either type of fault is referred to herein as an error. Such errors may occur intermittently, i.e., without immediate repetition, or they may occur consecutively. Experience has shown that defects giving rise to intermittent errors tend to correct themselves without the need for shut-down and repair, whereas when errors are repetitive the nature of the defect is usually such as to require shut-down and manual correction of the cause of malfunction.

Accordingly, it is the principal object of the present invention to provide an error analyzer and control mechanism for a stuffing machine which act to determine the nature of the error which occurs and to activate a reject device for indicating the imperfect assembly error and to shut down the machine in the event the error is of the repetitive type. Thus for self-correcting defects in the machine, the operation is uninterrupted, shut-down being limited only to more serious operational defects. A significant advantage of this arrangement is that it makes possible optimum production with minimum shut-down.

Also, an object of the invention is to provide a con-

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trol mechanism of the above-described type which functions to compensate the count of the newspaper assemblies to correct for rejects, whereby only perfect assemblies are counted. This count may be subtracted from the total number of machine cycles to determine the actual number of rejects and the percentage of errors.

Also, an object of the invention is to provide a control mechanism for a stuffing machine, which mechanism is capable of functioning to effect rejection or shutdown of the machine whether the machine is operated with its hoppers active, at full speed delivering in successive pockets, or at half speed delivering in alternate pockets.

A further object of the invention is to provide a control mechanism which is of simple and efficient design and which is reliable in operation.

Briefly stated, these objects are accomplished by a control mechanism for the stuffing machine which responds to signalling means on the hoppers of each feeding station indicating the existence of an error thereat, the control mechanism actuating a reject device when an error is encountered. The control mechanism acts to shut down the stuffing machine when a series of consecutive errors is encountered, this being accomplished by a group of three switches adapted to cut off the motor for the machine only when the first and second switches are simultaneously actuated by reason of repetitive errors in full speed operation or the first and third switch are simultaneously actuated at half speed operation.

For a better understanding of the invention, as well as other objects and further features thereof, reference is had to the following detailed description to be read in conjunction with the accompanying drawings, wherein like elements in the several views are represented by like reference numerals.

In the drawings:

Fig. 1 is a front elevational view of a stuffing machine showing the general arrangement of the mechanism.

Fig. 2 is a simplified top view of the stuffing machine.

Fig. 3 is a simplified side view along the lines 3—3 in Fig. 2 illustrating one of the feeding stations.

Fig. 4 is a simplified side view along the lines 4—4 in Fig. 3 showing the discharge of completed assemblies from the pockets of the machine at the discharge station thereof.

Fig. 5 is a simplified view along the lines 5—5 in Fig. 4 showing completed papers carried away on a transport conveyor and the location of the reject arm and counter arm thereon.

Fig. 6 is a longitudinal section taken through a control mechanism in accordance with the invention.

Fig. 7 is an end view of said mechanism.

Fig. 8 is a plan view showing a fragment of the pin wheel of the control mechanism.

Fig. 9 is a section taken through the air-operated clutch interposed in the counter mechanism.

Fig. 10 is a schematic diagram illustrating the operation.

Referring now to the drawings and more particularly to Figs. 1 to 5, a standard newspaper stuffing machine is illustrated in simplified form, the machine comprising a rotary turret, generally designated by numeral 10 and provided with a framework 11 which supports a series of circumferentially-arranged V shaped pockets 12. Turret 10 includes a central hub 13 which is rotatable about the axis of a central post 14.

Rotation of the hub 13 about vertical post 14 serves to move pockets 12 in a closed orbital path about the post axis at the center of the framework. The mechanism for rotating the turret about the post includes a main motor 16 driving a bevel gear 17 which engages a ring gear 18 affixed to hub 13. In Fig. 2, it will be

assumed that the turret is rotated in a counterclockwise direction.

Suitably affixed to the floor above the path of pockets 12 as they move in their circular path are a series of stationary feeding stations 21a—21e, indicated in block outline in Fig. 2, five of these feeding stations being illustrated. Each of the feeding stations includes a hopper and a mechanism for pulling off an insert stacked in the hopper and sending it into the open upper end of a pocket passing therebeneath.

As illustrated in Fig. 3, the feeding station 21 may comprise a rotatable drum 22 having a detachable clamp means, such as a pivotal finger 23 carried on the periphery thereof, which when actuated by a suitable mechanism operates to move over and to clamp onto the edge of an insert 25 disposed in its path. Drum 22 is rotated in synchronism with the movement of the pockets by means of a shaft 24 drivably connected to the hub portion of the turret as by a gear 26 engaging ring gear 18.

A stack of inserts 30 is held within framework 27 of the feeding hopper, the bottom of the stack being supported on a movable shoe 28 and a ledge 29. Shoe 28 is fixed to a shaft 31 mounted in framework 32 of the hopper, and the shoe is pivoted outwardly to release the edge of an insert by rotating shaft 31. Movement of shaft 31 is also synchronized by a suitable mechanism with movement of the turret. A sucker 33, operated by a vacuum, pulls the edge of an insert downwardly against drum 22 after release of the insert by shoe 28, as shown in the dotted outline in Fig. 3. As the drum rotates, finger 23 is caused to move outwardly from the periphery of the drum and up over the edge of an insert to grasp the insert and pull it down with the rotating drum.

A detecting switch 34 mounted on framework of the feeding hopper adjacent the periphery of the drum functions as a signal means to indicate the existence of an error in the collection of a section by a pocket moving under the feeding hopper. The detector switch has a pivotable arm 35 carrying a roller at the end thereof which is biased inwardly against the drum. If for any reason too many inserts are picked up by sucker 33 and finger 23, arm 35 of the detector switch shifts in a direction away from the drum when the inserts pass under the switch closing switch 34. The switch is also closed if no inserts are picked up by the drum so that arm 35 of the caliper switch moves inwardly against the drum. Thus, movement of the detector in either direction as a result of an error produces switching action.

Switch 34 is prevented from signaling a fault when those portions of drums 22, which during normal functioning ordinarily would not carry an insert, are moved past switch 34. This may be done either mechanically, or electrically, as by switch 36 (carried by the framework of the hopper) actuated on rotation of shaft 24 by element 38 secured to the shaft. Switch 36 is operable to close the circuit to switch 34 only during those intervals that an insert should be carried by drum 22 past switch 34.

As turret 10 rotates about axis 14, successive pockets 12 pass a discharge station, indicated generally by the outline 41 in Fig. 2. A mechanism is provided at the discharge station to open the pockets so that the completed assembly of inserts collected by the pockets are deposited on a conveyor, such as outgoing conveyor 42.

Referring to Fig. 4, each of the V shaped pockets 12 is constituted by a pair of sloping walls, a fixed wall 46 secured to the frame structure of the turret and a movable wall 47 pivotable at its upper edge about pivot 48. The lower end of wall 47 is pivoted inwardly to close the pocket when collecting inserts. On passing discharge station 41, the lower end of pivotal wall 47 is caused to move outwardly away from fixed wall 46, whereby the assembly

of inserts collected by the pocket slides out and is discharged.

Extending into the discharge station and driven by gear 18 is a shaft 49. Shaft 49 is connected by gearing (not shown) to a laydown shaft 50. Laydown arms such as laydown arm 51 are secured to shaft 50 and are rotated by shaft 50 in a clockwise direction in Fig. 4. The rotation of shaft 50 is synchronized with the movement of the turret so that the arms catch a paper assembly dropped from a pocket when a pocket is opened at its bottom end. The paper is then deposited by continued movement of the arms on conveyor 42.

A shaft 52 carried in the framework of the discharge station rockably mounts a pair of displacing arms 53 and 54. Each of these arms is provided with a fluid motor, indicated at 55 and 56, having a piston rod movable in and out in response to the inlet and exhaust of fluid under pressure to opposite sides of the motor cylinder. A solenoid motor may be used, if desired, in place of the fluid motor. The arms are rocked about shaft 52 independently of each other by actuation of the fluid motor connected thereto. The lower end of each displacing arm, when pivoted to the right in Fig. 4, comes into contact with the leading edge of a completed paper, which becomes trailing from then on, causing the paper to assume a skewed position, while the paper is being deposited on transport conveyor 42 by arms 51.

It will be noted, with reference to Fig. 5, that arm 53 is located so as to strike the right end of a paper viewed in the direction of travel of the conveyor, and this arm constitutes the reject arm or reject mechanism of the stuffing machine. The other arm 54 is positioned so that the arm, when rocked about shaft 52, strikes the left end of a paper, this arm skewing the paper in a direction opposite from arm 53. Arm 54 constitutes the arm displacing one paper in predetermined amount in bundle.

The turret, collecting pockets, feeding stations and discharge station so far described are conventional. Inserting or stuffing machines of this type are available, for instance, from the T. W. & C. B. Sheridan Co. of New York and are disclosed in the above-identified Schweizer patent, while specific details of various mechanisms may vary, depending upon their source and age, generally the machines are designed to perform the function of the machine described, that is, to collect in a series of pockets a series of inserts fed from feeding stations movable relative to the pockets, the pockets then dumping a completed paper at a discharge point on an outgoing conveyor which transports the paper to other points in a plant.

In accordance with the invention, a control mechanism is provided which acts to stop rotation of the turret and hence relative movement of the pockets past the feeding stations whenever consecutive errors occur, as determined by the detector switch 34 on each hopper. When a self-clearing error (normally one miss) is indicated by detector switch 34, relative movements of the pockets past the feeding stations continues but the control mechanism performs the function of actuating motor 55 connected to displacing arm 53 at the moment the imperfect assembly resulting from the error is deposited on conveyor 42, thereby effectively marking the paper as a reject.

The control mechanism also actuates a device which compensates in the count made by arm 54 for the imperfect assembly by decoupling the counter for a number of impulses equal to the number of rejected copies. The mailer, in loading the paper from conveyor 42, thus has an accurate count of perfect papers.

Referring now to Fig. 2, the control unit 61 for the stuffing machine is driven by a stub shaft 62 connected as by chain 63 to the motor shaft for main motor 16 which drives the turret. In this manner, the stub shaft is rotated at a speed related to the movement of pockets 12 past the feeding stations 21. The ratio of rotation of

the stub shaft 62 to that of the turret is one-to-one so that the control unit makes a full rotation for each cycle of turret operation.

Referring now to Figs. 6 to 10 for a description of the control mechanism, the stub shaft 62 extends through one wall of a housing 64 suitably fixed to the frame of the stuffing machine. Shaft 62 terminates in a pinion 65, engaging a gear 66 which drives a belt 67 coupled to the shaft 68 of a rotary memory device 69. Memory device 69 is a disc-shaped wheel and carries along its outer periphery a series of circumferentially arranged trigger elements or pins 70.

Pins 70 are slidably mounted in the wheel 69 and are equally spaced about the periphery therein, the pin being shifted to various positions as will be described. The pins 70 correspond in number to the number of pockets 12 in the stuffing machine. Pockets 12 of the stuffing machine are equally spaced about the periphery of the turret 10 so that the pocket spacing corresponds exactly to the pin spacing and the angular positions in terms of polar coordinates also correspond. Pins 70 are slidable within bushing 71 and are resiliently maintained therein by spring elements 72, there being one spring for each two pins.

Mounted within the control unit housing in a plane parallel to that of the pin wheel 69 is a platform 73 below which is supported a series of electromagnetic striker mechanisms 74, only one of which is shown in Fig. 6. There are as many strikers as there are feeding stations. Each striker mechanism includes a striker element 75 which is maintained in a retracted position by a helical spring 76, the element 75 being projected in the direction of the pin wheel 69 when the solenoid of the mechanism is electrically energized. The striker element, when projected, operates axially to shift a pin aligned with the element from an inactive to an active position.

The striker mechanisms 74 are positioned about the platform with the same relative spacing as the hoppers at the feeding stations 21 about the turret structure. The pin wheel 69 rotates in the same direction as the turret and at the same speed so that each pin passes the striker mechanisms at the same rate that the related pockets of the turret pass the feeding stations. Thus the movement of the pins in the memory device relative to the striker mechanism is coordinated with the movement of the pockets relative to the feeding stations.

Supported on a mounting plate 77 disposed in parallel relation to the pin wheel 69 on the side opposed to that of the platform 64 are several groups of stopping switches 78 corresponding in number to that of hoppers on machine. Only one switch is shown in Fig. 6. Each group, as best seen in Fig. 8, is constituted by a cluster of three normally open microswitches 78a, 78b and 78c. Each switch has a resilient switch arm 79 protruding outwardly therefrom, which arm carries a roller 80 at the end thereof. A pin 70 in an active position is operable to engage roller 80 of these switches, thereby to flex the switch arm so as to actuate the normally open switch.

The roller 80 of the first switch in the group is placed ahead of the center of the associated striker element in the path of the pins a distance equal approximately to three-fourths the distance between a pair of pins. By so doing, a pin in an active position strikes the roller 80 and depresses it at the same time that the next succeeding pin moves over the center of the striker element. The spacing between the rollers of the switches in each group corresponds to the spacing between pins.

Mounted on plate 77 in advance of each group of switches 78 in the path of the pins is a cam 81 which is adapted to engage an activated pin and to partially reset it to a sub-active point below the level of the rollers 80 of the switches, but not to its inactive position. Thus the pin will not actuate the switches in the succeeding groups thereof. At a point on the mounting plate 77

corresponding to the discharge station of the stuffing machine there is supported a bleeder valve 82 having an actuating roller 82r at a level to be engaged by pins at the sub-active position thereof. Valve 82, when actuated, operates the motor 55 for the reject arm. Mounted ahead of valve 82 in the path of the pins is a master cam 84 which acts to return the pins to the inactive position for the next cycle of operation.

In order to count the predetermined number of stuffed papers for each bundle group, a counting chain 83 is provided which is mounted on a sprocket wheel 84 rotatably supported on the housing of the control mechanism and coupled through a count compensator clutch 85 to the input drive shaft 62. The sprocket wheel moves one tooth for each operating cycle of the stuffing machine. The counting chain 83 consists of a number of sections, each section containing an equal number of links corresponding with the predetermined bundle count which may be any desired number. Each section is provided with one link which carries an extended pin to engage the roller 86 of a bleeder valve 87 which acts to operate the motor 56 of the counting arm 54 on the machine.

In order to avoid counting imperfect assemblies, the reject valve 82 is also operatively coupled to the compensator clutch 85 so as to cause disengagement between the input shaft and the sprocket wheel 84 for one complete cycle when the reject valve is operated. As shown separately in Fig. 9, the compensator clutch includes intermeshing clutch elements 88 and 89, the former being coupled through shaft 90 to the input shaft 62 and the latter through shaft 91 to the sprocket wheel 84. An air chamber 92 is provided which, when filled by compressed air, operates against the spring-biased diaphragm 93 to effect disengagement of the intermeshing clutch elements 88 and 89.

Referring now to the simplified schematic diagram in Fig. 10, the operation of the control mechanism will now be explained, the diagram being in the form of a straight line projection of the circular pin wheel arrangement and the elements associated therewith. The explanation will be confined to two solenoid striker mechanisms as they act in conjunction with the pins on the memory device, and the associated two groups of stopping switches 78. Obviously, the number of striker mechanisms and switch groups depends on the number of feeding stations included in the machine. Pin movement in Fig. 10 is from left to right.

As shown at the left side of Fig. 10, the pins 70 initially have an inactive position as they approach the first solenoid 74 coupled to the detector switch 34 or error indicator of the first feeding station. Pin A is representative of the inactive position and in this position the major portion of the pin is below the surface of the wheel. Let us now assume that an error is registered at the first feeding station thereby energizing the solenoid and causing the striker element 75 of the striker mechanism 74 to elevate the appropriate pin 70 to the active position, as represented by letter B. Let us further assume that the error resulting in the actuation of striker 74 at the first station is a transient and is not followed by successive errors. This is the type of fault that is usually self-clearing, hence it is not necessary to shut down the machine but only to operate reject device. In this case the active pin B will first strike the roller 80 of switch 78a so as to close the switch, and, as the pin continues its travel, it will in sequence strike the rollers of switches 78b and 78c of the first group of stopping switches.

Switches 78a and 78b are connected in series, and switch 78b is in turn connected in parallel with switch 78c with respect to a relay 94 and a voltage source 95 therefor. Thus, when switches 78a and 78b are closed simultaneously, the circuit to relay 94 will be completed and relay 94 will act to break the switching circuit to the main motor 16 for the stuffing machine, thereby shutting

down the machine. Since in the example given only one pin is active because of an intermittent error, the switches 78a, 78b and 78c will be closed in succession but no two of these switches will be simultaneously operated. Hence the motor circuit for the stuffing machine is not cut off by a single error.

Let us now take the case where a series of consecutive errors occurs. In this event, a like series of pins will be raised to active position and all three switches 78a, 78b and 78c will be simultaneously triggered, thereby shutting down the machine. Let us further assume a situation where the machine operates at half speed to fill every other pocket and that in this situation successive misses occur, causing a series of alternate pins to be raised to their active position. Here, too, the machine will shut down, for now switches 78a and 78c are simultaneously closed to complete the circuit to relay 94. In summary, therefore, the shutdown circuit which operates in conjunction with the switch group is effective only when the pins are made active in direct succession in full speed operation and alternately made active in half speed operation, this condition arising from consecutive errors in the feeding hopper.

When the pins leave the switch group, they encounter the partial reset cam 81 which lowers the active pins to a subactive or intermediate position, as indicated by character C. The sub-active position is below the level of the rollers 80 of the shutdown switches. Hence, while a pin made active in advance of a given switch group operates upon the switches in the group, the pin after leaving the group is lowered by cam 81 to a point where it has no effect on subsequent switch groups in the mechanism.

When the pin C in the sub-active position reaches the roller of the bleeder valve at the discharge point in the cycle, it actuates the valve to cause the reject arm to skew the incomplete assembly and it also serves to operate the count compensator in the manner previously described. Finally, the pin in the sub-active position engages the master reset cam and is restored to its inactive position in preparation for the next cycle of operation.

While there has been shown what is considered to be a preferred embodiment of the invention, it will be understood that many changes may be made therein without departing from the essential features of the invention, as called for in the appended claims.

We claim:

1. In a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets which collect the sections and discharge the assembly thereof at a discharge point, motor means to move said pockets past said stations to receive said sections, a detecting device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket and a reject device to mark erroneous assemblies; a control mechanism for said machine comprising a memory device movable in synchronism with said pockets and having a series of like trigger elements mounted for movement from inactive to sub-active and active positions, means responsive to said detecting devices to shift the trigger elements related to the receiving pocket then at said station when an error occurs from an inactive to an active position, a plurality of stationary switching means disposed adjacent said memory device at positions corresponding to said feeding stations and actuated by said active position elements to shut off said motor means only when consecutive errors occur, a partial reset cam disposed in advance of each of said switching means in the path of said elements to shift said active position elements to a sub-active position whereby successive switching means are not engaged thereby, and sensing means actuated by elements at the sub-active position to actuate the reject device of said machine.

2. In a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets, motor means to move said pockets past said stations to receive said sections, a detecting device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket and a reject device to mark erroneous assemblies; a control mechanism for said machine comprising a memory device movable in synchronism with said pockets and having a series of like trigger elements mounted for movement from an inactive to sub-active and active positions, a plurality of strikers corresponding to said feeding stations and responsive to said detector devices to shift the trigger element related to the receiving pocket then at said station from an inactive to an active position when an error occurs, switching means disposed in advance of each striker member in the path of said trigger elements and coupled to said motor means, said switching means being actuated by said active position elements and being connected to shut off said motor means only when consecutive errors occur, a partial reset cam disposed in advance of said switching means to shift said active position elements to a sub-active position whereby successive switching means are not engaged thereby, and means actuated by an element at the sub-active position to actuate the reject device of said machine.

3. A control mechanism for a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets which collect the sections and discharge the assembly thereof at a discharge point, motor means to move said pockets past said stations to receive said sections, a detector device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket and a reject device to mark erroneous assemblies; said control mechanism comprising a memory device movable in synchronism with said pockets and having a series of like trigger pins mounted for movement from an inactive to sub-active and active positions, a plurality of strikers corresponding to said feed stations and responsive to said detector devices to shift the trigger pins related to the receiving pocket then at said station from an inactive to an active position when an error occurs, switching means disposed in advance of each striker in the path of said trigger pins and coupled to said motor means, said switching means being actuated by said active position pins and being connected to shut off said motor means only when consecutive errors occur, a partial reset cam disposed in advance of said switching means in the path of said pins to shift said active position pins to a sub-active position whereby successive switching means are not engaged thereby, and sensing means actuated by pins at the sub-active position to actuate the reject device of said machine.

4. In a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets on a rotary turret, which pockets collect the sections and then to discharge the assembly thereof onto an outgoing conveyor, motor means to rotate said turret whereby said pockets move past said stations to receive said sections, a detector device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket and a reject device on said conveyor to mark erroneous assemblies thereon, a control mechanism for said machine comprising a memory device constituted by a pin wheel operatively coupled to said motor and movable in synchronism with said pockets, said wheel having a series of circumferentially arranged like trigger pins slidable therein for movement from an inactive to sub-active and active positions, a plurality of electromagnetic striker members adjacent said wheel equal in number to said feeding stations and responsive to said detector device to shift the pins relative to the receiving

pocket then at said station from an inactive to an active position when an error occurs, switching means disposed in advance of each striker member in the path of said pins and electrically coupled to said motor means, said switching means being actuated by said active position pins and being connected to shut off said motor means only when consecutive errors occur, a partial reset cam disposed in advance of said switching means to shift said active position elements to a sub-active position whereby successive switching means are not engaged thereby, and valve means actuated by pins at the sub-active position to actuate the reject device of said machine.

5. A control mechanism for a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets on a rotary turret, which pockets collect the sections and discharge the assembly thereof onto an outgoing conveyor, motor means to rotate said turret whereby said pockets move past said stations to receive said sections, a detector device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket, a reject device on said conveyor to mark erroneous assemblies thereon and a counting device on said conveyor, said control mechanism comprising a memory device constituted by a pin wheel movable in synchronism with said pockets, said wheel having a series of circumferentially arranged like trigger pins slidable therein for movement from an inactive to sub-active and active positions, a plurality of electromagnetic striker members adjacent said wheel equal in number to said feeding stations and responsive to said detecting device to shift the pins relative to the receiving pocket then at said station from an inactive to an active position when an error occurs, switching means disposed in advance of each striker member in the path of said pins and electrically coupled to said motor means, said switching means being actuated by said active position pins and being connected to shut off said motor means only when consecutive errors occur, a partial reset cam disposed in advance

of said switching means to shift said active position pins to a sub-active position whereby successive switching means are not engaged thereby, and valve means actuated by pins of the sub-active position to actuate the reject device of said machine and to interrupt the count to said counting device.

6. In a newspaper stuffing machine provided with a plurality of stationary feeding stations having a feed mechanism for supplying paper sections to a series of pockets on a rotary turret, which pockets collect the sections and discharge the assembly thereof onto an outgoing conveyor, motor means to rotate said turret whereby said pockets move past said stations to receive said sections, a detecting device operatively coupled to the feed mechanism at each station to indicate an error in the supply to said pocket and a reject device on said conveyor to mark erroneous assemblies thereon; a control mechanism for said machine comprising a memory device constituted by a pin wheel movable in synchronism with said pockets and having a series of circumferentially arranged like trigger pins slidable therein for movement from an inactive to sub-active and active positions, a plurality of electromagnetic striker members adjacent said wheel corresponding to said feeding stations and responsive to said detecting device to shift the pins relative to the receiving pocket then at said station from an inactive to an active position when an error occurs, switching means disposed in advance of each striker member in the path of said pins, each constituted by a group of three switches electrically coupled to said motor means to shut off said motor means only when consecutive errors occur as represented by the simultaneous activation of at least two of said switches, a partial reset cam disposed in advance of each switching group to shift said active position pins to a sub-active position whereby successive switching means are not engaged thereby, and valve means actuated by pins of the sub-active position to actuate the reject device of said machine.

No references cited.