

Sept. 21, 1965

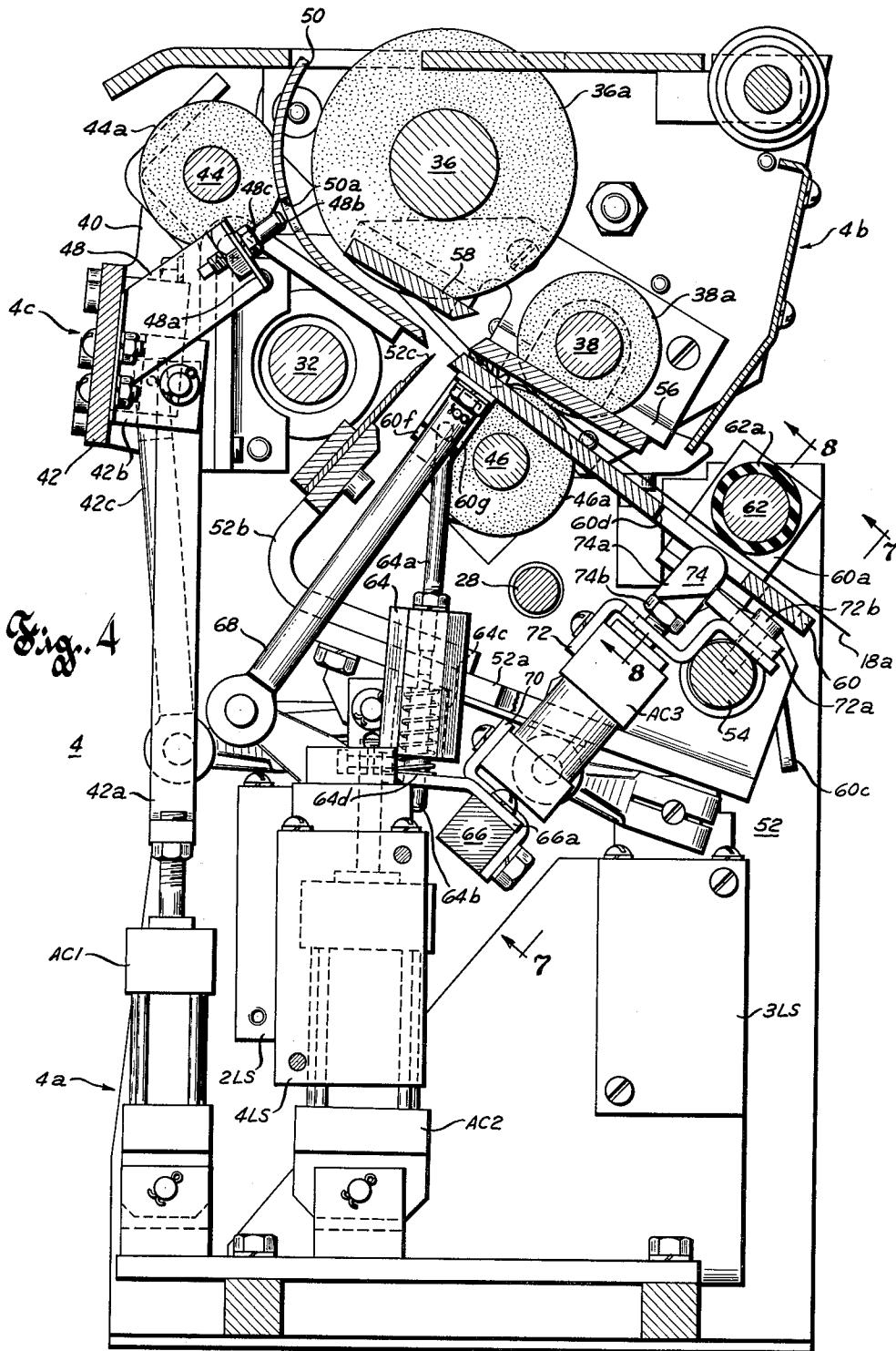
J. A. RAUENBUEHLER ETAL

3,207,018

JAM SENSING MECHANISM FOR A BOTTOM WRAP INSERTING MACHINE

Filed Aug. 19, 1963

7 Sheets-Sheet 3



Sept. 21, 1965

J. A. RAUENBUEHLER ETAL

3,207,018

JAM SENSING MECHANISM FOR A BOTTOM WRAP INSERTING MACHINE

Filed Aug. 19, 1963

7 Sheets-Sheet 4

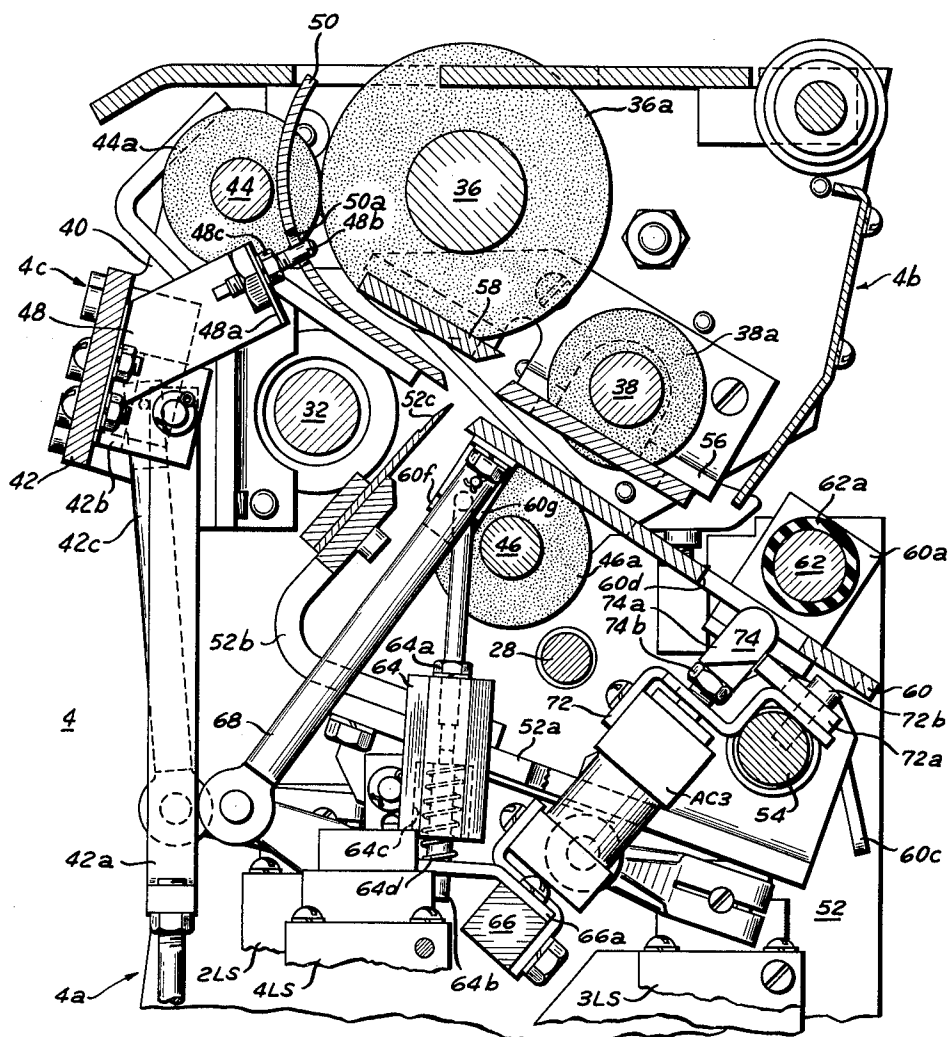


Fig. 5

Inventors,
John H. Rauenbuehler
John H. Trumble
By *H. R. Rader*
Attorney

Sept. 21, 1965

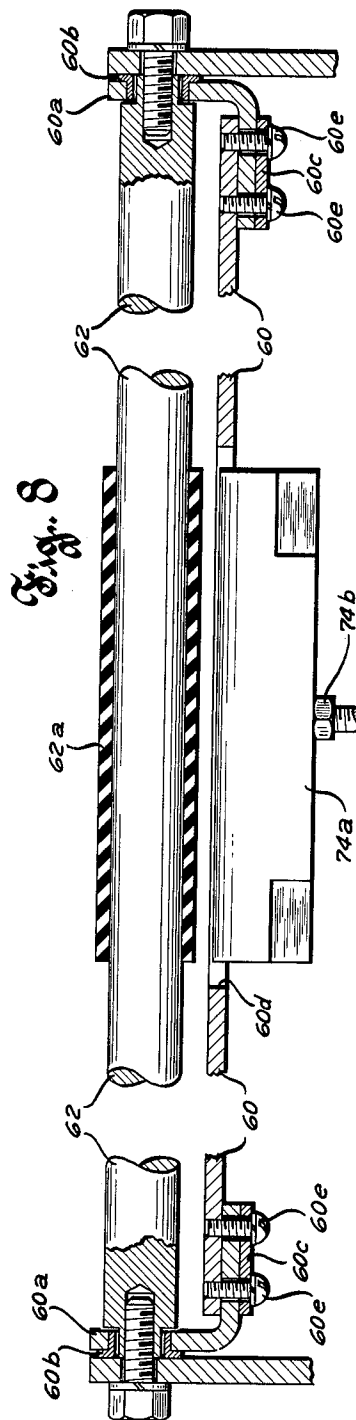
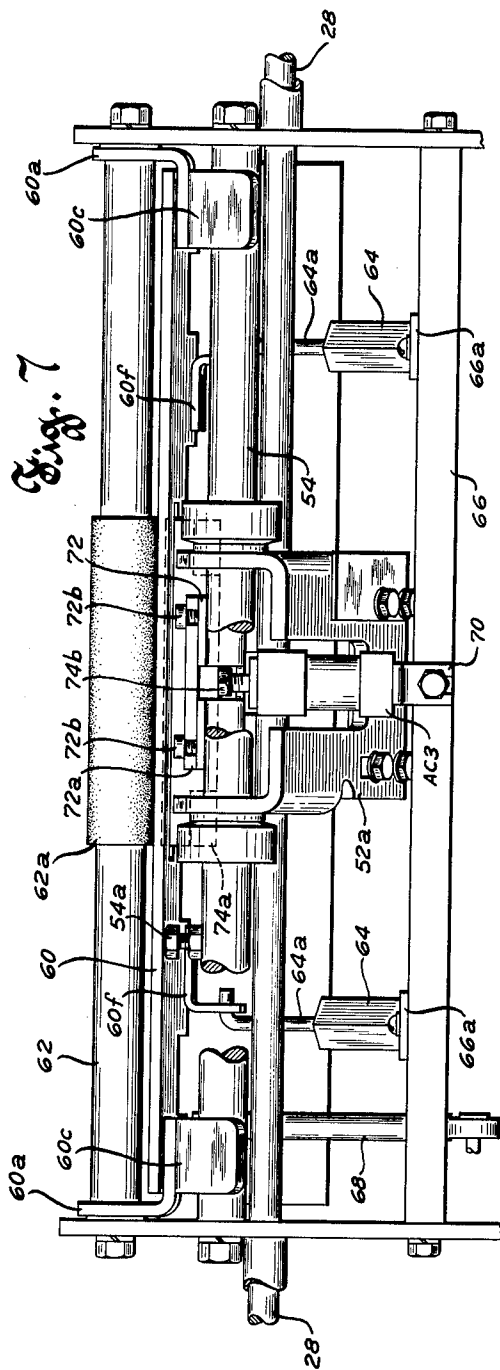
J. A. RAUENBUEHLER ET AL

3,207,018

JAM SENSING MECHANISM FOR A BOTTOM WRAP INSERTING MACHINE

Filed Aug. 19, 1963

7 Sheets-Sheet 6



Sept. 21, 1965

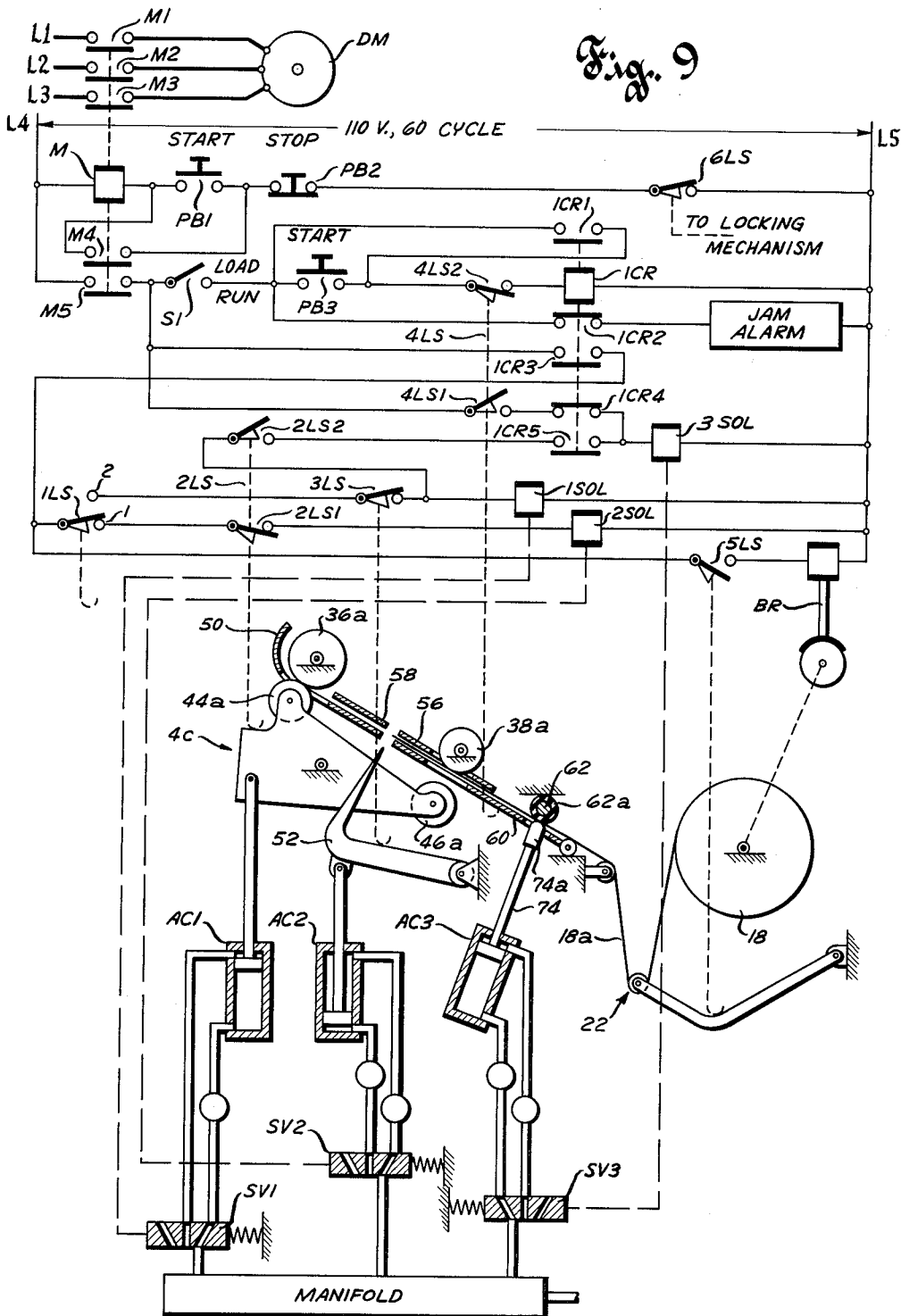
J. A. RAUENBUEHLER ETAL

3,207,018

JAM SENSING MECHANISM FOR A BOTTOM WRAP INSERTING MACHINE

Filed Aug. 19, 1963

7 Sheets-Sheet 7



1

3,207,018

JAM SENSING MECHANISM FOR A BOTTOM WRAP INSERTING MACHINE

John A. Rauenbuehler, New Berlin, and John H. Trumble, Wauwatosa, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Filed Aug. 19, 1963, Ser. No. 303,113
7 Claims. (Cl. 83-67)

This invention relates to bottom sheet wrap inserting machines.

More particularly, this invention relates to improvements in machines for inserting sheet wraps under stacked articles such as newspapers and the like.

The bottom wrap inserter device incorporating this invention is generally of the type described and claimed in the following copending applications: Frank S. Hyer, Serial No. 227,898, filed October 2, 1962; Frank S. Hyer et al., Serial No. 227,929, filed October 2, 1962; and Dwight H. Hurlbut et al., Serial No. 230,955, filed October 16, 1962.

Bottom wrap inserting machines of this type are designed to handle the high speed output of modern mail-room apparatus. However, web jams that occur in these machines cause much loss of time before the machines can be cleared and restored to operation. The longer a web is allowed to feed into a machine after it has started to jam, the tighter the jam becomes, and consequently the longer it takes to clear the machine.

It is therefore a primary object of this invention to provide an improved bottom wrap inserting and cut-off machine having a jam sensing mechanism.

It is another object of this invention to provide an improved bottom wrap inserting and cut-off machine having means for automatically sensing and clearing a jam.

It is still another object of this invention to provide a machine of the aforementioned type which is easily and quickly reloaded after a jam has been cleared.

It is still another object of this invention to provide a machine of the aforementioned type which has safety means to prevent the web from being driven upon reloading the machine until the device is put into normal operating condition.

These and other objects will appear in the following description and claims when taken in conjunction with the drawings, in which:

FIGURE 1 is a side elevational view of a complete bottom wrap inserter device with a portion of the cover elements removed;

FIG. 2 is an end elevational view of a portion of the device to a larger scale;

FIG. 3 is a front elevational view of that portion of the device shown in FIG. 2 to a larger scale;

FIG. 4 is a sectional view taken generally along line 4-4 of FIG. 3;

FIGS. 5 and 6 are views similar to FIG. 4 showing different operating positions of various parts;

FIG. 7 is an elevational view of that portion of the device as indicated by line 7-7 of FIG. 4;

FIG. 8 is a partial sectional view as indicated by line 8-8 in FIG. 4; and

FIG. 9 is a partially schematic and partially diagrammatic view of the control system for the device.

Pictured in FIG. 1 is a counter-stacker unit 2 of the type described in the Howdle et al. Patent No. 2,819,661, granted January 4, 1958 and now Reissue No. 25,018, connected to the device, which is the version described as utilizing an output conveyor 2a and power of such a counter-stacker unit 2 to run its various components. Output conveyor 2a delivers loose stacked and aligned articles, such as stacks of newspapers, to a cutter-drive unit 4 and output conveyor 6 of the bottom wrap inserter.

2

Counter-stacker output conveyor 2a is driven from a drive motor DM (FIG. 9) through a chain 8 and sprocket connection. A second sprocket 10 secured to the same shaft as the sprocket for chain 8 supplied the mechanical power to cutter-drive unit 4 and bottom wrap inserter output conveyor 6 through a chain 12 and sprockets 14 and 16, respectively.

A supply roll 18 of bottom wrap material, such as kraft paper, is placed on a cradle assembly 20 located below the output conveyor 6, and a web of material 18a is payed off the roll and threaded around a dancer roll assembly 22 and into the cutter-drive unit 4.

Electrical control components for the device are mounted on a panel behind a door 24 in the frame of the device. In line with door 24 and on the opposite side of the frame is a drawer which houses the pneumatic components for the device, such as an air manifold, and solenoid operated slide valves. The electrical power supply source is taken from the counter-stacker control circuit as will be described more fully later, and the air supply manifold is connected to a suitable source of pressure air supply. All connections made from the components to the various limit switches and air cylinders within the cutter-drive unit 4 are of the plug-in or quick-disconnect type to facilitate removal of the cutter-drive unit in its entirety (FIG. 2).

Referring to FIG. 2, the cutter-drive unit 4 consists of three main sections: a lower or base section 4a; an upper or power section 4b; and a pressure roll transfer section 4c which are hinged together in a manner described and claimed in the aforementioned copending application of Dwight H. Hurlbut et al. to provide easy access to the interior of the unit.

A locking mechanism is provided to insure that the upper section 4b is properly positioned upon the lower section 4a before the unit can function. The locking mechanism consists of a pair of levers 26 which are pivotally mounted at their lower ends to the outside surfaces of the end plates of lower section 4a, and have at their upper ends latching members 26a which engage surfaces on the upper section 4b to lock the latter to the lower section 4a. Levers 26 are spring biased toward the locked position, and the mechanism is unlocked by manually turning a handle which is rigidly secured to a shaft 28 which has a pair of cams 28a also secured to it. Cams 28a cooperate with a pair of rollers 26b secured one each to the levers 26 to move the levers and hence the latching members out of engagement with the surfaces on upper section 4b. One of the levers 26 has a lower extension which trips open a limit switch 6LS whenever the unit is not completely locked shut, and in this way provides an electrical interlock safety feature, as can be more clearly seen in FIG. 9.

Power is supplied to the upper section through a gear drive. The sprocket 14 drives a gear 30 through a common shaft 32 located in the lower section 4a. Gear 30 in turn drives a gear 34 which is attached to one end of a shaft 36 located in upper section 4b. Shaft 36 has another gear attached at its other end which, through an idler gear, drives a gear attached to a shaft 38, also located in the upper section 4b. Shafts 36 and 38 have a plurality of rubber drive rollers 36a and 38a, respectively, rigidly secured thereto at spaced intervals along their axes.

Pressure roll transfer section 4c is pivotally mounted on bearings about shaft 32. Section 4c comprises a pair of end plates 40 bolted one at each end to a member 42, and a pair of idler shafts 44 and 46 rotatably mounted between the end plates. Shafts 44 and 46 have a plurality of rubber idler rollers 44a and 46a, respectively, rigidly secured thereto at intervals corresponding to those

of rollers 36a and 38a on shafts 36 and 38. An air cylinder AC1 is attached at one end to the frame of the cutter-drive unit 4 and has a lever 42a which is bolted to its piston rod and connects to a clevis 42b attached to member 42 near its center. When the air cylinder AC1 extends, the section 4c rotates clockwise to cause idler rollers 44a to engage drive rollers 36a, and when the air cylinder retracts, the section rotates counterclockwise to cause idler rollers 46a to engage drive rollers 38a.

With reference to FIGS. 3, 4, 5 and 6, it can be seen that member 42 also has secured to it a pair of brackets 48 extending upwardly and inwardly of the unit 4. Brackets 48 have leg portions 48a bent at right angles to the brackets, and have secured to the legs 48a means for receiving threaded pins 48b. With rollers 38a and 46a engaged as shown in FIG. 4, pins 48b lie behind a curved guide plate 50 mounted rigidly to lower section 4a and are in close proximity to a pair of clearance holes 50a formed in the guide plate 50. When the pressure roll transfer section 4c is rotated clockwise so that the rollers 36a and 44a are engaged, the pins 48b extend through holes 50a a predetermined distance which is adjustable by threading the pins into leg portions 48a and locking the pins in position with a pair of jam nuts 48c.

A cutter-blade assembly 52 is pivotally mounted upon a fixed shaft 54 within the lower section 4a. The cutter-blade assembly 52 has a yoke portion 52a that pivots on the shaft 54 at one end and supports a bracket 52b, carrying a saw-toothed blade 52c, at its other end. Bracket 52b is mounted on yoke 52a by four bolts which take into tapped holes in bracket 52b and fit into a pair of slots in yoke 52a. Lengthwise adjustment of the cutter-blade assembly 52 is afforded by sliding the bracket 52b along the yoke 52a, within the limits of the slots, and then tightening down the four bolts. An air cylinder AC2 provides the motive force for the cutter-blade assembly through its piston rod which is threaded to a U-shaped adaptor and a clevis attached to the yoke 52a.

The upper section 4b has a pair of guide plates 56 and 58 rigidly attached to it. Plate 58 overlies a flat portion of guide plate 50 as can be seen in FIGS. 4, 5 and 6. Another guide plate 60 is pivotally mounted from a shaft 62 rigidly mounted to the lower section 4a, as seen most clearly in FIGS. 7 and 8. A tight fitting rubber sleeve 62a surrounds shaft 62 midway between its ends. A pair of L-shaped brackets 60a having bearings 60b mounted in their vertical legs, swing freely at the ends of shaft 62 (FIG. 8). The guide plate 60 is bolted at each end to the upper surfaces of the horizontal legs of bracket 60a by pairs of bolts 60e which also secure a pair of manual trip levers 60c to the underside of said horizontal legs.

A pair of brackets 60f are attached to the underside of the free end of guide plate 60. The vertical legs of brackets 60f have clearance holes to receive the horizontal portions of a pair of rods 64a which are threaded into a pair of spring housing members 64 at their lower ends. Spring housing members 64 have guide posts 64b secured at their other ends which fit into pilot clearance holes formed in a pair of brackets 66a secured to a tie rod 66 which forms part of the frame of unit 4. Housing members 64 also have recesses 64c formed in their lower ends concentrically with guide posts 64b and helical compression springs 64d are placed around posts 64b with the ends bearing against the upper surface of brackets 66a and the bottoms of recesses 64c, thus providing an upward bias upon guide plate 60. The uppermost position of guide plate 60 is determined by a bolt 54a (FIGS. 6 and 7) which bears against the underside of the right hand end of guide plate 60 as seen in FIG. 6. Bolt 54a applies a counterclockwise moment upon guide plate 60 about shaft 62, and therefore, any upward adjustment of bolt 54a will lower the upper position of the left hand end of guide plate 60. The lower limit of

plate 60 is determined by the bottom surfaces of spring housing members 64 when they contact the upper surfaces of brackets 66a. The housing members 64 may be threaded up or down on the rods 64a to increase or decrease the amount of travel of guide plate 60. Jam nuts are provided to lock the adjusting nut 54a and the spring housing members 64 in place once the final adjustments are completed.

A third bracket 60g secured to the underside of the free end of guide plate 60, has a rod 68 pivotally attached to its vertical leg. At its other end rod 68 is attached to the actuator to a limit switch 4LS. Limit switch 4LS is preset to trip upon a slight downward travel of guide plate 60 as will be more fully described later.

An air cylinder AC3 is rigidly mounted between tie rod 66 and shaft 54 by a pair of brackets 70 and 72. Air cylinder AC3 is the motor element for a web brake or backlash member 74, which protrudes through an opening 60d in the guide plate 60 and holds the web of bottom wrap against the rubber sleeve 62a to prevent the web from falling out of the device when it is severed. A brake bar 74a is threaded onto the piston rod of air cylinder AC3 and held in place by a jam nut 74b. A flat, rectangular bearing member 72a is bolted to the bracket 72 and shaft 54 by a pair of socket head bolts 72b which pass through slots in bearing member 72a and enlarged clearance holes in bracket 72 and take into threaded holes in the shaft 54. Bearing member 72a is brought just into contact with brake bar 74a to insure that the length of brake bar 74a and the axes of shaft 62 and rubber sleeve 62a are parallel, and then bolts 72b are tightened to lock the bearing member in place.

With reference particularly to FIG. 9, the motor DM of counter-stacker unit 2 is connected to a three-phase, 60 cycle A.C. source, such as 220 or 440 volts, through lines L1, L2 and L3, while its control components, and hence the components to control the bottom wrap device, are connected to a more common 110 volt, 60 cycle A.C. source through supply lines L4 and L5. The air supply manifold is connected to a suitable source of air pressure. The upper section 4b of cutter-drive unit 4 is locked to the lower section 4a by the locking mechanism, thereby closing the safety interlock limit switch 6LS.

To start the device a "START" pushbutton switch PB1 located on the counter-stacker is momentarily depressed to cause current to flow from line L4 through the operating coil of a main contactor M, the "START" switch PB1, a normally closed pushbutton "STOP" switch PB2, which is also located on the counter-stacker unit, and the closed safety interlock limit switch 6LS. Main contactor M therefore energizes to close its normally open contacts M1, M2 and M3 which connect drive motor DM to supply lines L1, L2 and L3, respectively, to drive the counter-stacker 2, conveyors 2a and 6 and cutter-drive unit 4. Main contactor M also closes a contact M4 which completes a holding circuit around "START" switch PB1, thereby maintaining contactor M energized when switch PB1 is released, and a contact M5, which connects line L4 of the counter-stacker unit to the control circuit for the bottom wrap device.

A selector switch S1, located on the frame of the bottom wrap device (FIG. 1) is moved to its "RUN" position and a second pushbutton "START" switch PB3, also located on the bottom wrap device (FIG. 1) is momentarily depressed. Current then flows from line L4, through contact M5, selector switch S1, "START" switch PB3, a closed contact 4LS2 of a limit switch 4LS, and the coil of a control relay 1CR to line L5, thus energizing relay 1CR and closing its normally open contacts 1CR1, 1CR3 and 1CR5 and opening its normally closed contacts 1CR2 and 1CR4. Contacts 1CR1 close to provide a holding circuit around "START" switch PB3 to maintain relay 1CR energized when switch PB3 is released. Contact 1CR2 opens a circuit to an alarm device while contact 1CR3 closes to cause current to flow from line L4,

5

through contacts M5 and 1CR3, contacts 1 of a limit switch 1LS, contacts 2LS1 of a limit switch 2LS and a solenoid 2SOL to line L5. Solenoid 2SOL energizes therefore and pushes a spring return slide valve SV2 to its right-hand position, directing air to the underside of the piston of air cylinder AC2 and causing the cutter-blade assembly 52 to raise to its upper, or cutting position. A second "STOP" pushbutton switch could be mounted on the bottom wrap device if desired, and it would be connected in series with the "STOP" switch PB2.

As counter-stacker 2 delivers a stack of papers to its output conveyor 2a, the leading edge of the stack trips a limit switch 1LS, located within the counter-stacker unit to open its contacts 1 and close its contacts 2 and holds the limit switch in this position until the stack of papers passes and the limit switch actuator is released by the trailing edge. Opening the contacts 1 of limit switch 1LS opens the circuit to solenoid 2SOL which deenergizes and allows the valve SV2 to be spring returned to its left-hand position which directs air to the top of the piston of air cylinder AC2 and retracts the cutter-blade assembly 52.

As cutter-blade assembly 52 retracts it closes a limit switch 3LS which allows current to flow from line L4, through contacts M5 and 1CR3, the contacts 2 of limit switch 1LS, limit switch 3LS and solenoid 1SOL to line 5. This current flow energizes solenoid 1SOL which pushes a spring return slide valve SV1 to its right-hand position against the bias of its spring. In this position, valve SV1 directs air flow to the top of the piston of air cylinder AC1 which rotates the pressure roll transfer section 4c counterclockwise to engage idler rollers 46a with drive rollers 38a, pinching the web 18a between them (FIG. 4). As section 4c rotates to this position, it closes contacts 2LS2 of limit switch 2LS which causes current to flow from line L4, through contacts M5 and 1CR3, contacts 2 of limit switch 1LS, limit switch 3LS, contact 2LS2, closed contacts 1CR5 and a solenoid 3SOL to line L5. This energizes solenoid 3SOL which pushes a spring return slide valve SV3 to its left-hand position against the bias of its spring. In this position, valve SV3 directs air flow to the top of the piston of air cylinder AC3, retracting brake member 74a from engagement with rubber sleeve 62a on shaft 62 just shortly after the rollers 46a and 38a engage the web 18a. These rollers then drive the web 18a up through the guide plates 50 and 58, around rollers 36a and under the oncoming stack of papers.

Proper tension is placed upon web 18a by the dancer roll assembly 22. An electromagnet brake BR prevents the spindle of the cradle assembly 20, and hence the supply roll 18, from rotating while the brake BR is deenergized. When web 18a feeds up through the cutter-drive unit 4, the web raises the dancer roll. Upon raising a predetermined amount, a frame member of the dancer roll assembly 22 closes a limit switch 5LS to energize the brake BR and release the spindle. The weight of the dancer roll assembly causes the web to pay off the roll 18 as the assembly 22 moves downward until the limit switch 5LS reopens and the brake BR is again applied to the spindle.

When the trailing edge of the stack of newspapers releases the actuator of limit switch 1LS, the switch recloses its contacts 1 and reopens its contacts 2 which open the circuit to solenoid 1SOL to deenergize the latter. Deenergization of solenoid 1SOL allows slide valve SV1 to be spring return to its left-hand position, and thereby direct air to the bottom of the piston of air cylinder AC1 to rotate the pressure roll transfer section 4c to cause idler rollers 44a and drive rollers 36a to engage the web 18a. In so doing, section 4c trips a limit switch 2LS which is connected to the member 42 through a lever 42c to simultaneously extend the cutter-blade assembly 52 and the brake member 74 (FIG. 6). Con-

6

tacts 2LS1 close to complete the circuit from line L4 through contacts M5 and 1CR3, 1LS1, 2LS1 and solenoid 2SOL to line L5, thereby energizing solenoid 2SOL. The latter pushes slide valve SV2 to its right-hand position and it in turn directs air flow to the underside of the piston in the air cylinder AC2 to raise the cutter-blade assembly 52. The contacts 2LS2 open to deenergize the solenoid 3SOL which allows its valve SV3 to be spring returned to its right-hand position, which direct air to under side of the piston of air cylinder AC3 and raises the brake member 74.

This completes a cycle in a smooth running operation of placing a sheet of wrap under a stack of newspapers, and like cycles will be repeated every time a stack of papers trips and releases the limit switch 1LS.

However, the operation does not always run as smoothly as described. Jams of the web 18a within the cutter-drive unit result in loss of time and money. The longer a web is allowed to be fed in under a jam condition often means a longer time required to clear the jam and restore the machine to service. An operator cannot always see the jam the minute it starts to build up, and even if he could, there is still human reflex time to consider. The present invention incorporates an electro-mechanical device to automatically sense and clear the jam as soon as it starts to build up.

FIG. 4 shows the cutter-drive unit after a bundle has tripped the limit switch 1LS to cause the brake bar 74a to release the web 18a and the pressure roll transfer section to move rollers 46a into engagement with the web and drive rollers 38a to drive the web up through guide plates 50 and 58. However, for one reason or another, the leading edge of web 18a fails to get through the opening between plates 56 and 60, which starts a jam as shown (FIG. 4). The jam exerts a wedge-like pressure between the two plates, and the stationary plate 56 forces the jam to move the hinged plate 60 downwardly against the bias of springs 64d. The movement of plate 60 trips limit switch 4LS which opens a contact 4LS2 to drop out relay 1CR and closes a contact 4LS1 which energizes solenoid 3SOL upon reclosure of normally closed contact 1CR4 as relay 1CR drops out. Solenoid 3SOL moves valve SV3 to the left as described before to cause the brake bar 74a to retract from the rubber sleeve 62a. Deenergization of relay 1CR also reopens contact 1CR3 which deenergizes solenoid 1SOL to cause the transfer section 4c to engage rollers 36a and 44a, and recloses normally closed contacts 1CR2 to energize an alarm device to alert an operator of the jam condition. The weight of the dancer roll assembly 22 pulls the web 18a down and free of the cutter-drive unit. This condition is illustrated in FIG. 5.

When the jam is relieved and the plate 60 is returned to its original position by spring 64d, the limit switch 4LS recloses its contact 4LS2 and reopens its contact 4LS1. The opening of contact 4LS1 drops out solenoid 3SOL which in turn extends the brake member 74. The closing of contact 4LS2 sets up a circuit for relay 1CR, but does not energize it because "START" switch PB3 is not depressed.

To reload the device, the operator turns the selector switch S1 to "LOAD" to prevent the control relay 1CR from being energized should anyone accidentally push the "START" button PB3. The operator then tears off the damaged web and folds over the leading edge of new web to attain a clean, straight edge. With one hand he pulls back on one of the manual trip levers 60c which pivot plate 60 the same as would a jam, thereby again tripping limit switch 4LS to reclose contact 4LS1 and energize solenoid 3SOL to retract brake member 74 and with the other hand he feeds the web into the cutter-drive unit past the disengaged rollers 38a and 46a. Should the operator feed the paper too far, the leading edge will stop against the pins 48b which protrude through the holes 50a when the rollers 36a and 44a are engaged. If the webs were not

7

stopped here there would be the chance that drive rollers 36a and pressure rollers 44a would catch the edge and feed it through the device, possibly causing injury to the operator and/or damage to the device. Once the web is in place the operator can release the lever 60c which will extend brake 74 again. To start the machine, the operator must turn selector switch S1 to "RUN" and push "START" button PB3. The machine is now ready to receive more stacks of papers.

We claim:

1. In a device for feeding a web from a source of supply, the combination comprising a pair of spaced driven rollers, a pair of spaced pressure rollers, means for moving said pressure rollers into web gripping relation with said driven rollers alternately, a guide member for guiding said web between a first set of driven and pressure rollers and beyond, said guide member being pivotally mounted and spring biased to a normal position against said web, and means responsive to movement of said guide member a given distance against the bias of said spring to cause the first mentioned means to move the pressure roller of said first set of driven and pressure rollers out of engagement with the web.

2. The combination according to claim 1 together with a web brake member, means for moving said brake member into web gripping relation with a cooperating stationary member upon the release of said first set of driven and pressure rollers under normal operating conditions, and means for holding said brake member out of web gripping relation with said cooperating stationary member upon the release of said first set of driven and pressure rollers in response to the aforementioned movement of said guide member.

3. The combination according to claim 1 together with a stationary guide member mounted in close proximity and substantially parallel to the normal spring-biased position of said pivotally mounted guide member and said web, said guide members forming a passage for said web, and between which a web jam exerts an outward force upon said members to cause said pivotally mounted member to move away from said stationary guide member.

4. The combination according to claim 2 together with a web tensioning member placed between said first set of driven and pressure rollers and said source of supply, and said web tensioning member aids in pulling the web back out from said device upon the release of said first set of driven and pressure rollers and hold-off of said brake member in response to the aforementioned movement of said guide member.

5. In a device for feeding a web from a source of supply, the combination comprising a pair of spaced driven rollers, a pair of spaced pressure rollers, means for moving said pressure rollers into web gripping relation with said driven rollers alternately, guide members for guiding said web between a first set of driven and pressure rollers and between a second set of driven and pressure rollers, stop means mounted to cooperate with said means for moving said pressure rollers, said stop means extending into the area of the path of the web

8

upon engagement of said second set of driven and pressure rollers and retracting from said area upon engagement of said first set of driven and pressure rollers, whereby said stop means will engage with the leading edge of said web when said web is being manually fed into said device.

6. The combination according to claim 5 wherein said stop means are adjustable, means being adjusted to extend into said area a distance wherein said means do not interfere with the web when said second set of driven and pressure rollers are driving said web.

7. In a device for feeding a web from a source of supply, the combination with a pair of spaced driven rollers, a pair of spaced pressure rollers, means for moving said pressure rollers into web gripping relation with said driven rollers alternately, a web severing member for severing said web into individual sheets of predetermined length and means for moving said member into a web severing position, a web brake member, means for moving said brake member into a web gripping relation with a cooperating stationary member, control means to operate said means to move said web severing member and said means to move said brake member as aforesaid upon the release of said first set of driven and pressure rollers under normal operating conditions, and a web tensioning member placed between said first set of driven and pressure rollers and said source of supply, of guide means for guiding said web between a first set of driven and pressure rollers and beyond, said guide means comprising a pivotally mounted member spring biased to a normal position against said web, and means responsive to movement of said pivotally mounted guide member a given distance against the bias of said spring to cause the first mentioned means to move to pressure roller of said first set of driven and pressure rollers out of engagement with said web, to hold said severing member out of its web severing position, and to hold said brake out of web gripping relation with said cooperating stationary member, said web tensioning member aiding in pulling said web from the device upon the release of said first set of driven and pressure rollers and hold-off of said web severing member and said brake member in response to the aforementioned movement of said pivotally mounted guide member.

References Cited by the Examiner

UNITED STATES PATENTS

1,957,711	5/34	Heyman	83—453
2,273,961	2/42	Hoppe	53—66
2,733,062	1/56	Corey	271—57
2,860,462	11/58	Sykes	53—66
3,004,728	10/61	Ihle	226—25

FOREIGN PATENTS

107,238 6/17 Great Britain.

ANDREW R. JUHASZ, *Primary Examiner.*

LEON PEAR, *Examiner.*