

Aug. 5, 1930.

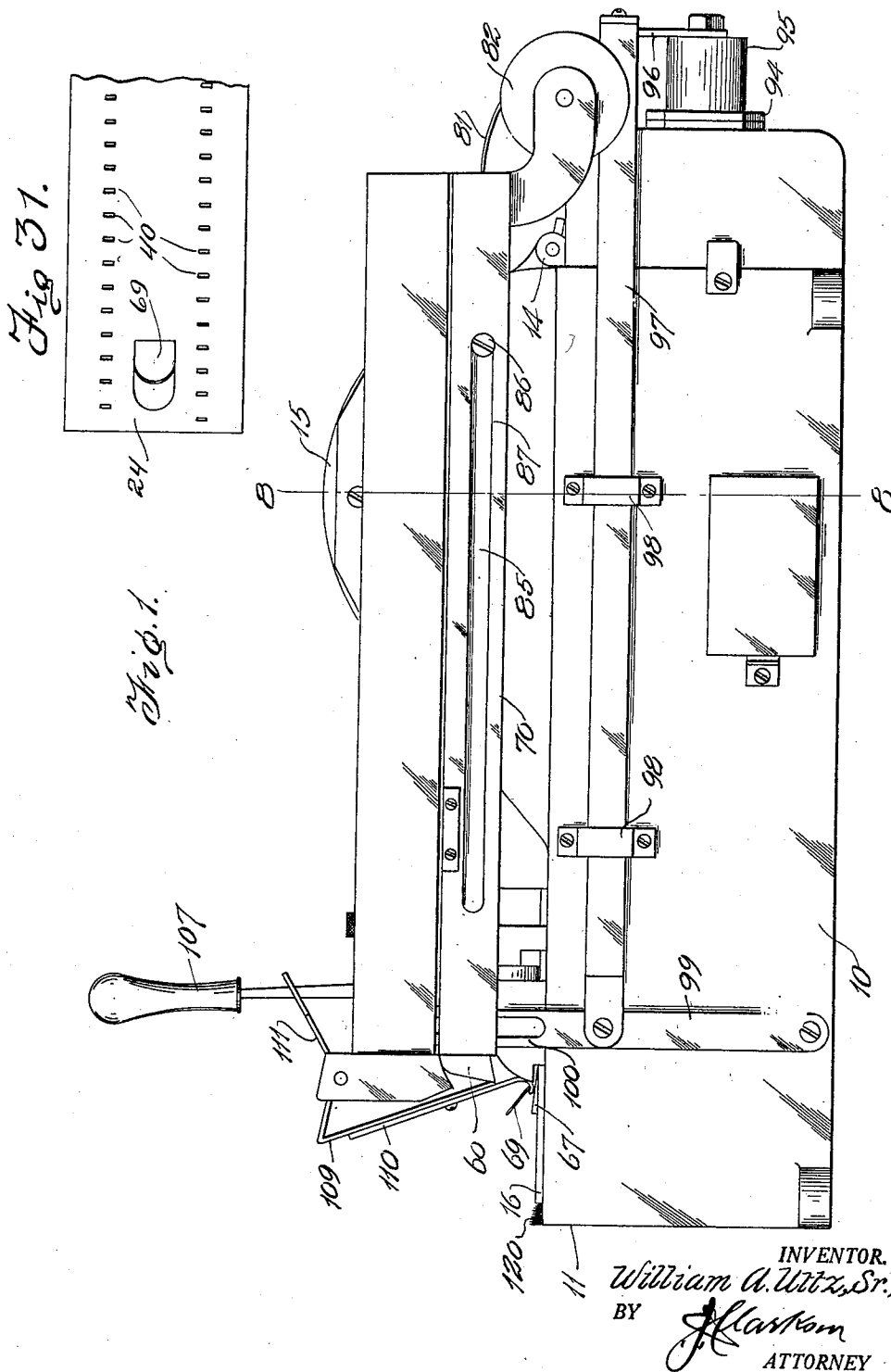
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 1



INVENTOR.

William A. Utz, Sr.,

BY

Alastair
ATTORNEY

ATTORNEY

Aug. 5, 1930.

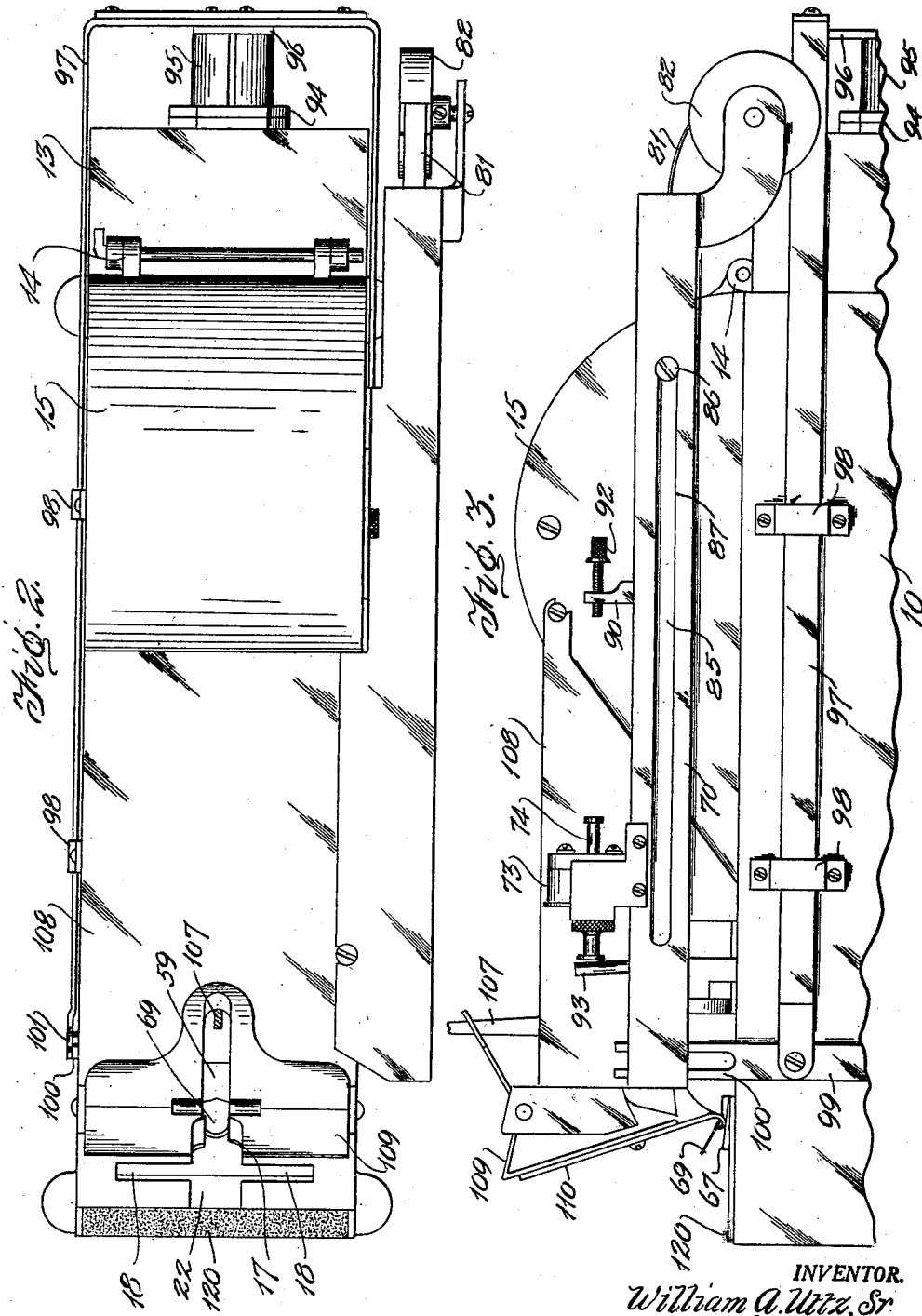
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 2



INVENTOR.

William A. Utz, Sr.

BY

J. H. Kohn
ATTORNEY

ATTORNEY

Aug. 5, 1930.

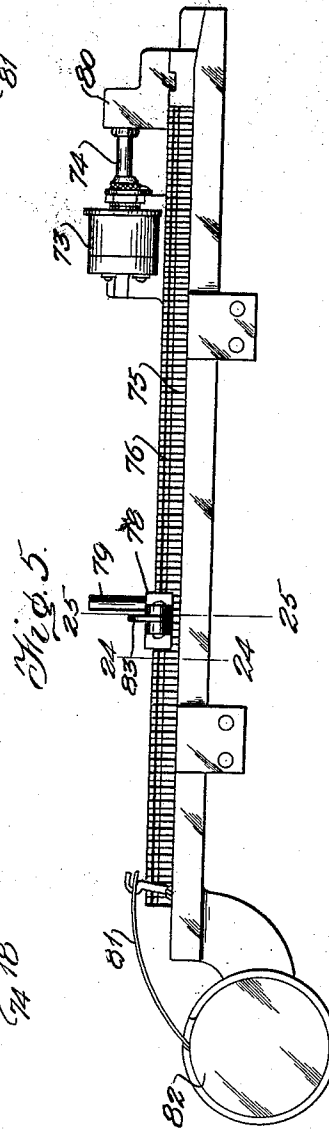
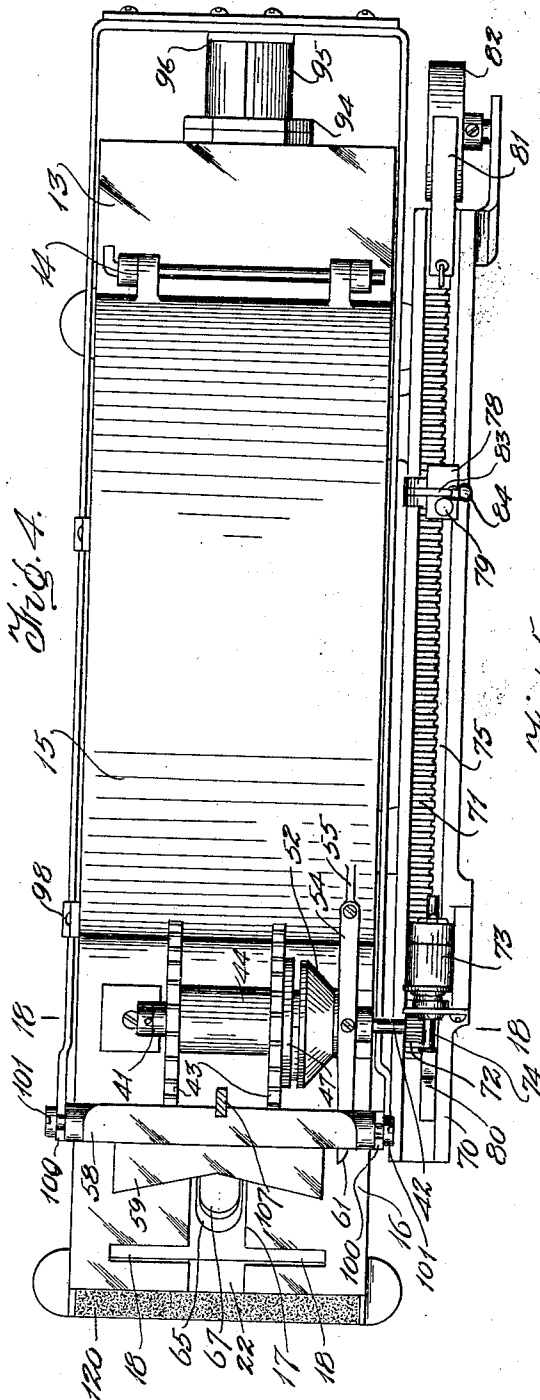
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 3



INVENTOR.
William A. Utz, Sr.
BY *[Signature]*
ATTORNEY

Aug. 5, 1930.

W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 4

Fig. 7

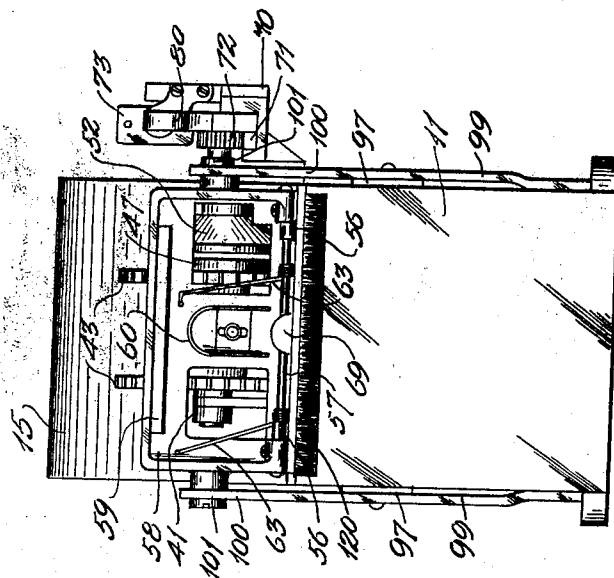
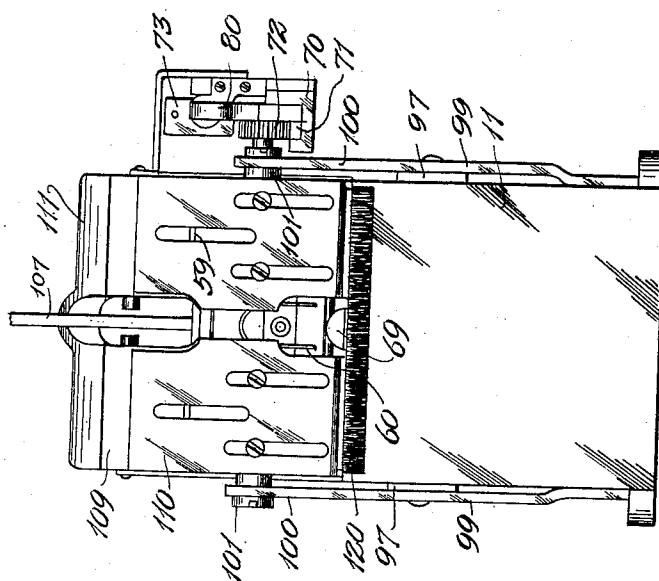


Fig. 6



INVENTOR.
William A. Utz, Sr.,
BY *W. A. Utz, Sr.*
ATTORNEY

Aug. 5, 1930.

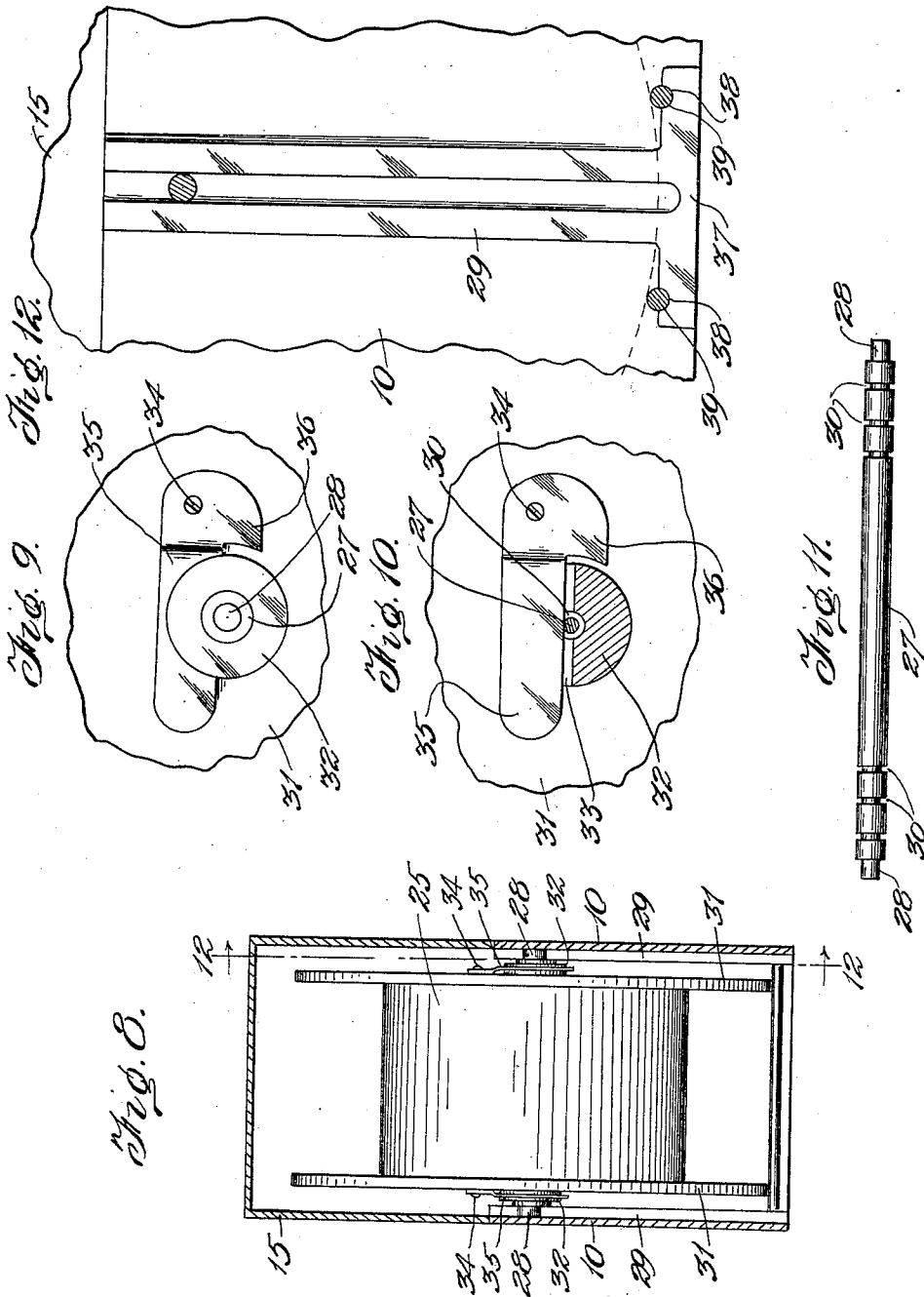
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 5



INVENTOR.
William A. Utz, Sr.
BY *W. A. Utz, Sr.*
ATTORNEY

Aug. 5, 1930.

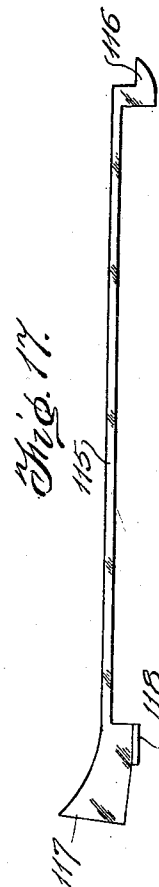
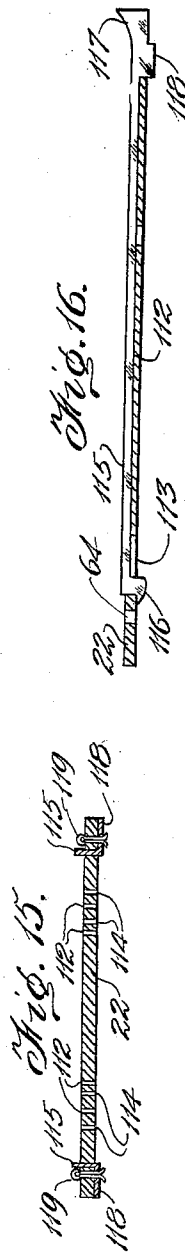
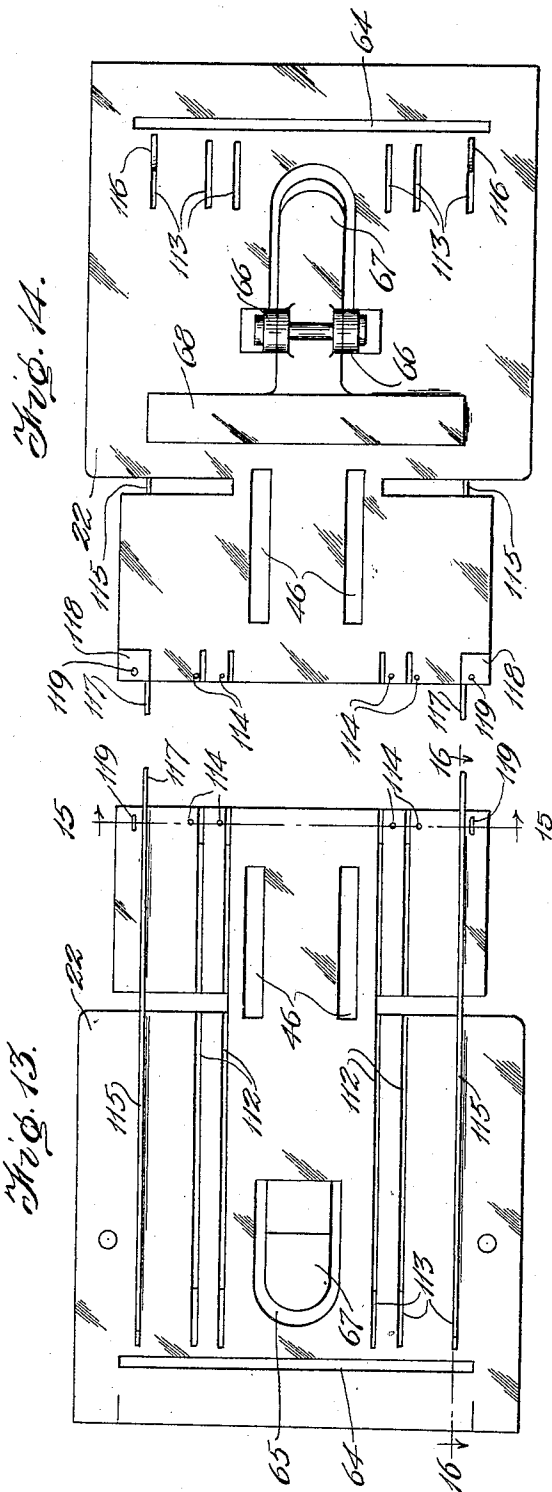
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 6



INVENTOR.
William A. Utz, Sr.,
BY *J. H. Karpman*
ATTORNEY

Aug. 5, 1930.

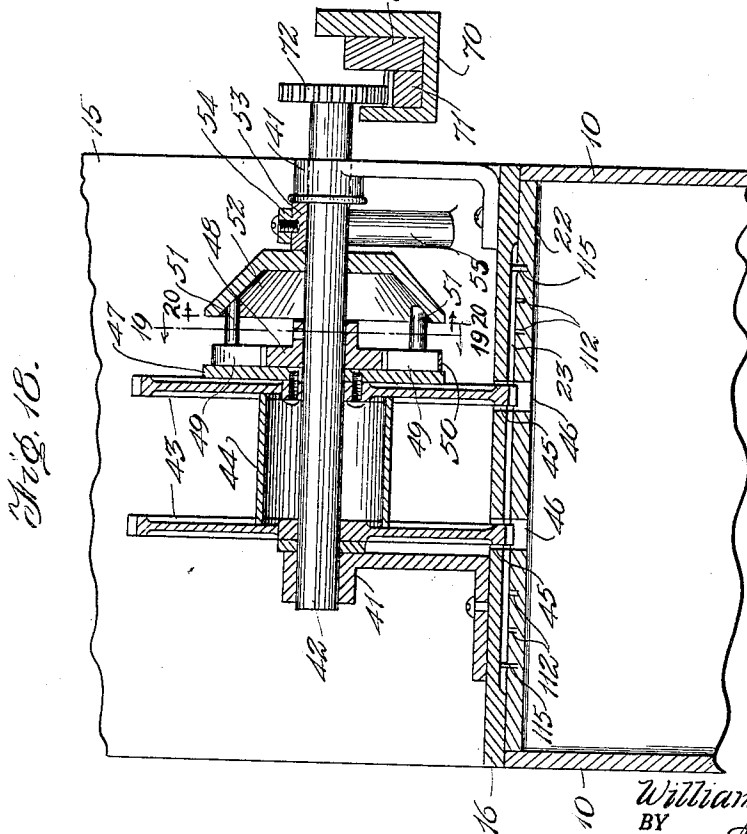
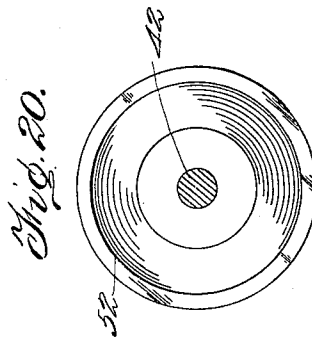
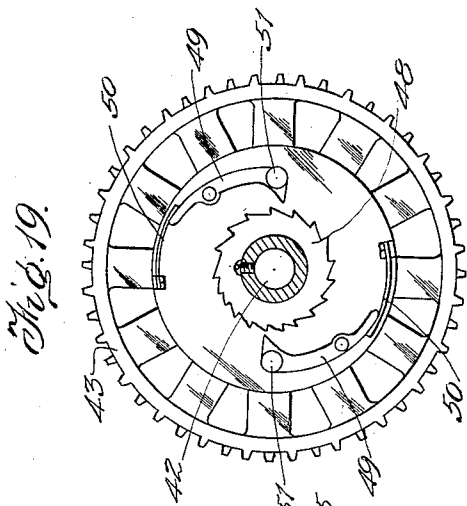
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 7



INVENTOR.

William A. Utz, Sr.,
BY *A. L.*

BY

ATTORNEY

Aug. 5, 1930.

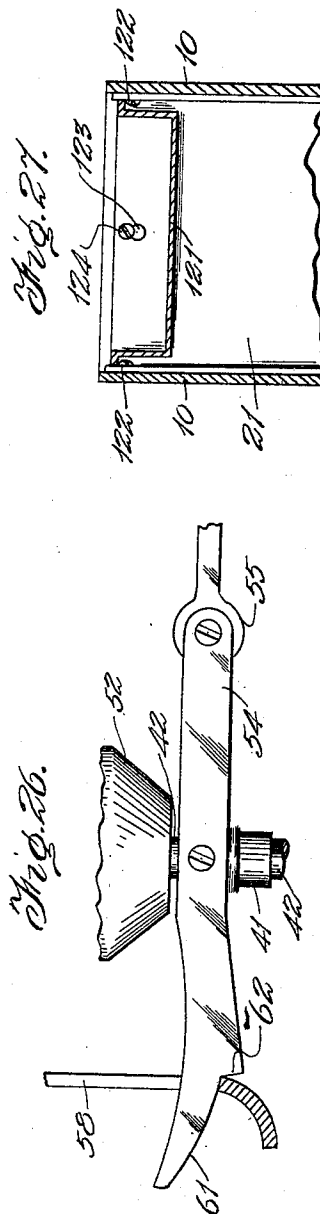
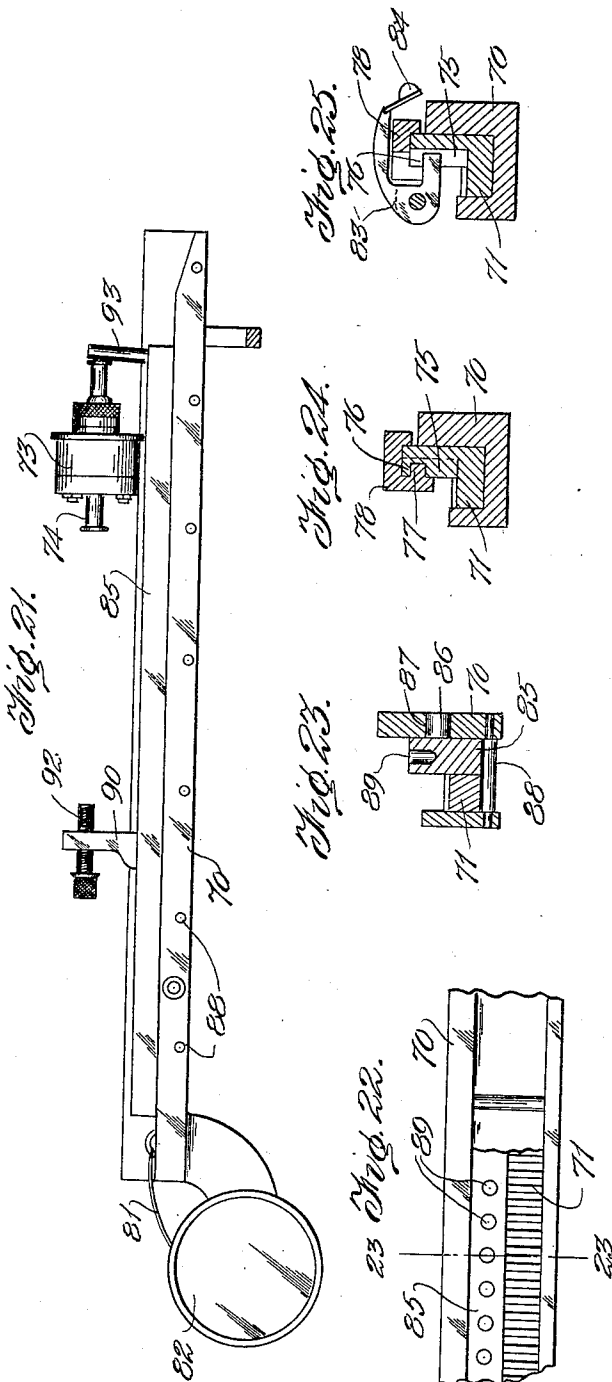
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 8



INVENTOR.
William A. Utz, Sr.,
BY *W. A. Utz, Sr.*
ATTORNEY.

Aug. 5, 1930.

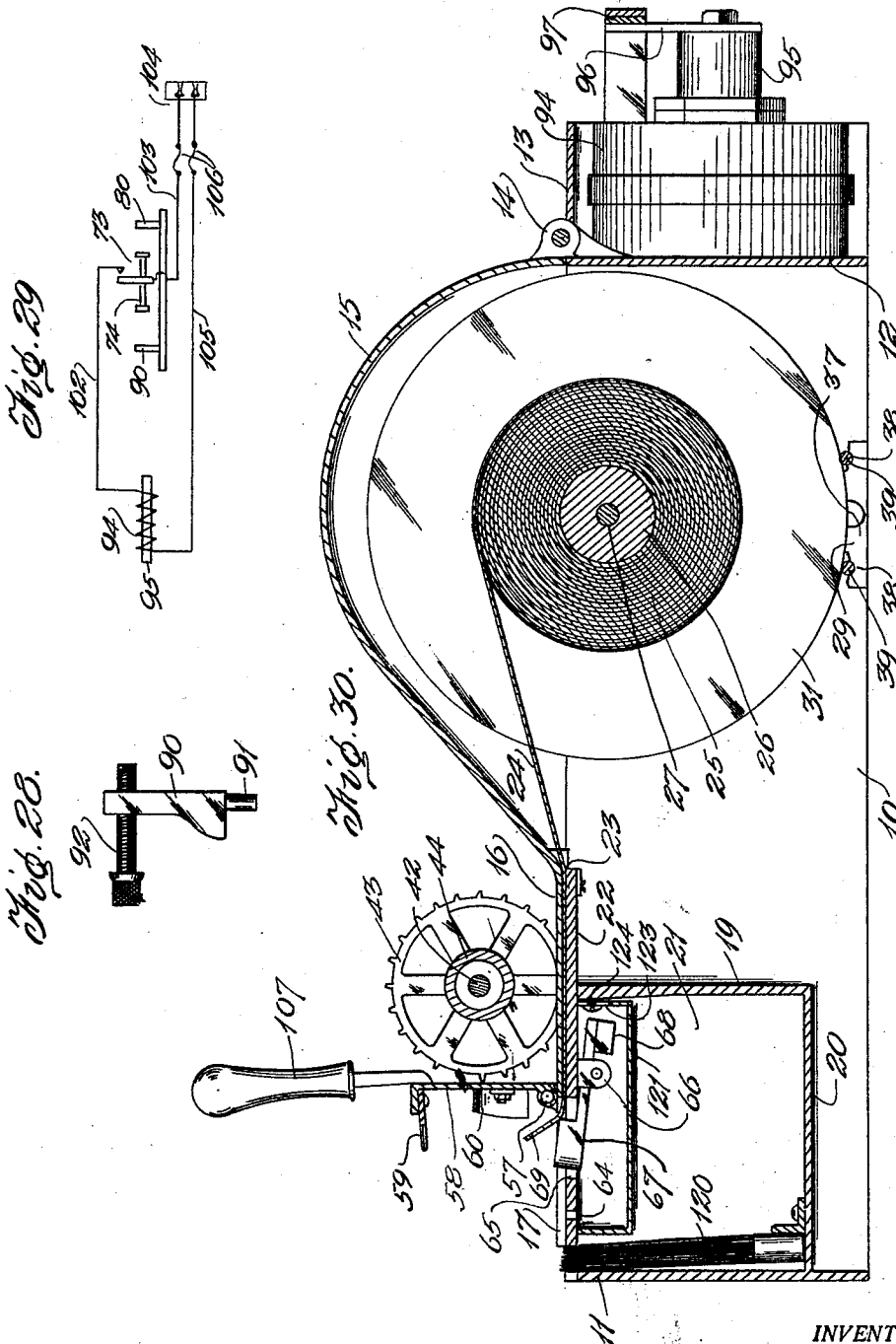
W. A. UTTZ, SR

1,772,170

WEB DISPENSING MACHINE

Filed Feb. 11, 1929

9 Sheets-Sheet 9



INVENTOR.
William A. Utz, Sr.,
BY *J. H. K. K. K.* ATTORNEY

UNITED STATES PATENT OFFICE

WILLIAM A. UTTZ, SR., OF CLEVELAND, OHIO

WEB-DISPENSING MACHINE

Application filed February 11, 1929. Serial No. 339,246.

This invention relates to web dispensing machines such as are used for dispensing from a roll of web predetermined lengths of web which are cut off from the roll of web as they are dispensed. Such machines may be used for a wide variety of purposes such as dispensing definite cut off lengths of cloth for various manufacturing purposes, definite lengths of wrapping paper, and other like uses but the machines are peculiarly adapted to the dispensing of gummed tape (either of paper or cloth).

More especially the invention relates to an electrically operated web dispensing machine wherein automatic cutting mechanism is brought into operation each time a predetermined length of web is drawn from the machine.

One important object of the invention is to provide an improved general construction of machines of this description.

A second important object of the invention is to provide an improved means, in such a machine, for regulating at will the lengths of the pieces of web to be severed.

A third important object of the invention is to provide, for such a machine, a length regulating mechanism which, while occupying a small space, will enable long lengths to be automatically cut from the web by simply drawing the web from the machine. In this connection I may mention that I am aware that certain machines exist in which, by repeated operation of certain parts, long lengths of web may be delivered and a cutting apparatus then actuated to sever such long lengths but in no machines at present existing am I aware of any mechanism in which the cutting mechanism is automatically operated upon the drawing off of such a long length as seven or eight feet or more as may be done with my invention.

A fourth important object of the invention is the provision of improved mechanism for regulating the closing and opening of an electric circuit through the web severing mechanism.

A fifth important object of the invention is to provide an improved form of web especially adapted for the effective opera-

tion of the web length regulating means upon the passage of the web from the machine.

A sixth important object of the invention is the provision of improved means for permitting the restoration of the parts to normal position after effective operation of the severing mechanism.

A seventh important object of the invention is to provide improved length regulating and electrically operated severing mechanism so related that the severing can only take place upon completion of the length regulating movement and the current through the severing mechanism is maintained until the length regulating elements have returned to their normal position.

An eighth important object of the invention is the provision of an improved form of web holding drum.

A ninth important object of the invention is to provide an improved tape guide for such machines.

With the above and other objects in view as will be hereinafter apparent, the invention consists in general of certain novel details of construction and combination of parts hereinafter fully described, illustrated in the accompanying drawings and specifically claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and:

Figure 1 is a side elevation of the machine.

Figure 2 is a plan view thereof.

Figure 3 is a side elevation of the upper part of the machine with the side hood for the length regulating mechanism removed.

Figure 4 is a plan view with the top and length mechanism hoods removed.

Figure 5 is an inner side elevation of the preferred form of length measuring or regulating mechanism.

Figure 6 is a front view of the machine.

Figure 7 is a front view of the machine with the finger guard removed.

Figure 8 is a vertical detail section on the line 8—8 of Figure 1 showing the web drum arrangement.

Figure 9 is an enlarged end view of a portion of the web drum showing the means for

adjusting the drum for different widths of web.

Figure 10 is a section through one of the drum hubs more clearly showing the adjusting mechanism.

Figure 11 is a side elevation of the web hub or spindle.

Figure 12 is a section on the line 12—12 of Figure 8 to an enlarged scale.

Figure 13 is a plan view of a certain guide plate used herewith.

Figure 14 is a bottom plan view of said guide plate.

Figure 15 is a section on the line 15—15 of Figure 13.

Figure 16 is a section on the line 16—16 of Figure 13.

Figure 17 is an enlarged side view of one of the guide strips.

Figure 18 is an enlarged section on the line 18—18 of Figure 4 and showing the clutch mechanism.

Figure 19 is a section on the line 19—19 of Figure 18.

Figure 20 is a section on the line 20—20 of Figure 18.

Figure 21 is an inner side elevation of a modified form of the length regulating mechanism the first form of which is shown in Figure 5.

Figure 22 is an enlarged plan view, partly broken away, of a portion of the device shown in Figure 21.

Figure 23 is a section on the line 23—23 of Figure 22.

Figure 24 is an enlarged section on the line 24—24 of Figure 5.

Figure 25 is an enlarged section on the line 25—25 of Figure 5.

Figure 26 is an enlarged detail showing the means for operating the clutch through the movement of the knife frame.

Figure 27 is a detail vertical section through the front of the machine showing the guard pan or water tank cover.

Figure 28 is a detail of a certain switch closing member used with the device shown in Figure 21.

Figure 29 is a diagram showing the wiring of the machine.

Figure 30 is a longitudinal vertical section through the machine.

Figure 31 is a view of a portion of the web used herewith, the view showing that portion from which a section has just been severed and disclosing the tab by which the web is drawn forwardly.

In the construction of the invention as herein disclosed there is provided a lower portion or base having side walls 10, a front wall 11 and a rear wall 12 which is located in advance of the rear edges of the side walls 10. In front of the rear wall 12 the base is open at the top but to the rear of the wall 12 the side walls 10 are connected by a top

wall 13 and it is to be noted that the rear sections of the side walls which are connected by the wall 13 form a rear housing which is removable from the remainder of the base. At the top of the rear wall 12 is a hinge 14 to which is hinged the rear end of a swinging cover having an arched rear portion 15 and a flat front portion 16 which extends forwardly and terminates at a point closely adjacent the front of the machine, being provided at its forward edge with a longitudinally extending tab slot 17. Extending laterally in each direction from this tab slot there is provided in the flat portion 16 a knife slot 18. Between the forward portions of the side walls 10 extends a rear well wall 19, the space between this wall and the wall 11 being closed by a wall bottom 20. Covering the top of this water well 21 is a platen 22 which will be more particularly described later and the construction of which, with said appended parts, is best seen in Figures 13 to 17. This platen is spaced slightly below the flat portion 16 of the cover so that between the portion 16 and the platen there is formed a web guide slot 23 wherethrough may move the web 24 as it is unwound from the web roll 25. This web roll has the usual central spool 26 and this spool is carried on the shaft 27 of a web drum. The construction and mounting of this drum is best seen in Figures 8 to 12 inclusive and it will there be noted that the shaft 27 is provided at each end with journal portions 28 which fit into the slotted guides 29 carried by the side walls 10. Also adjacent each journal 28 the ends of the shaft 27 are provided with annular grooves 30 and on these ends are fitted the drum sides 31 each of which has on its outer side a centrally disposed boss 32 provided with a slot 33 extending substantially one-half way through the boss 32 so that as the shaft 27 passes through these bosses one-half of the shaft is exposed in the slot 33. Pivoted to the respective side 31 by a pivot 34 is a latch 35 of proper thickness to pass through the slot 33 and engage in a selected groove 30. This latch has a stop tail 36 engageable with the boss when the latch is raised to shaft disengaging position so that the latch can not be thrown too far out of position. Thus the distance between the plates 31 may be regulated and these plates held in adjusted position to suit web of different widths. Moreover, at the bottom of each guide 29 is a base portion 37 having upwardly opening slots 38 at its ends and in these slots rest cross bars 39 which serve to support the drum sides 31 as can be seen by reference to Figures 12 and 30.

By reference to Figure 31 it will be seen that the web 24 is provided with two longitudinally extending rows of spaced perforations 40, the perforations in one row being staggered with respect to the perforations

in the other row. Obviously, while two such rows have here been shown I may use as many rows as I may desire for wide material and also may even use a single row, if I find it advisable to do so, for the web. Mounted on
 5 top of the member 16 is a pair of bearings 41 wherein is held a shaft 42 and on this shaft is mounted a driving gear which preferably consists of a pair of toothed wheels 43 con-
 10 nected together to rotate in unison by a drum or hub 44. These wheels dip down through slots 45 in the portion 16 and into slots 46 in the platen 22, the teeth of the gears thus ex-
 15 tending into the web guide slot 23. The teeth on one gear are staggered with respect to the teeth on the remaining gear so as to properly engage in the web perforations 40. It may here be explained that the purpose
 20 of having the staggered arrangement is because it is desirable to have the effective spacing of the gear teeth quite small and in a paper web if the perforations 40 of any row are made too close together then the paper
 25 between the perforations readily tears out. Consequently, by the method adopted here the effective spacing of the gear teeth is equal to one-half of the distance between two adja-
 30 cent perforations of a row while the actual spacing between the perforations is twice that distance. Thus a very considerable body of paper exists between adjacent perforations in a row.

Fixed to one of the gears is a pawl plate 47 and adjacent this pawl plate there is fixed on
 35 the shaft 42 by a suitable set screw a toothed ratchet 48. Pivoted on the disk or plate 47 is a pair of pawls 49 which are urged out of engagement with the ratchet 48 by means of
 40 springs 50. Projecting laterally from the head of each pawl is a pawl operating pin 51 and on the shaft 42 is slidably mounted a hollow frusto-conical clutch member 52 which engages these pawls so that, reference being
 45 had to Figure 18, when the clutch member is moved to the left the pawls are forced inwardly to engage the ratchet 48 while, if the clutch member be released, the springs 50
 50 force the pins 51 outwardly and thus cause movement of the clutch member to the right. On the shaft 42 is mounted a substantially semi-circular yoke 53 which bears against
 55 the clutch 52 so that as the yoke is forced to the left so will the clutch move. This yoke is operated by a shipper lever 54 which is pivoted to a boss 55 on the arched portion 15
 of the cover.

On the flat portion 16 of the cover is a pair of spaced knife frame bearings 56 wherethrough
 60 passes a rod 57 supporting a swinging knife frame 58 which carries at its upper edge a severing blade 59 and also supports a horse-shoe like tab cutting blade 60. Reference being had to Figure 26 it will be seen that the forward end of the lever 54 is provided with
 65 a cam face 61 terminating in a shoulder 62

and that one side of the frame 58 engages this cam face 61 to move the lever 54 into clutch-
 ing position when the frame 58 is in raised or inactive position, the shoulder 62 acting as
 70 a stop to limit the movement of the knife frame 58. Thus when the frame is raised the gears are clutched to the shaft while de-
 75 pression of the frame in moving to cutting position frees the lever 54 and unclutches the gears from the shaft. It is very important that this should be so as will be understood
 80 from what follows hereafter. Normally the frame 58 is held raised by the knife frame springs 63. Reference being had to Figures 13 and 14 it will be seen that in the platen 22
 85 there is provided a knife slot 64 for the severing knife and a horse-shoe shaped opening 65 for the tab forming knife. Further, beneath this platen are formed bearing 66 which
 90 pivotally support a tab raising lever 67 normally held in raised position by a counterweight 68. Thus when the frame is swung
 95 down to sever the web the tab is formed and, upon upward movement of the frame taking place, the lever 67 lifts the tab 69 (Figure 31)
 100 ready for grasping by the fingers. At one side of the machine the shaft 42 projects beyond the side plate 10 and supported at this side is a channel shaped guide bar 70 wherein
 105 is mounted for longitudinal movement a rack 71 which is engaged by a pinion or gear 72 so that as the web is drawn out from the machine its engagement by the wheels 43 will, when
 110 the shaft is clutched to these wheels, cause the rack 71 to likewise move forwardly. It is to be particularly noted that the ratio between the pitch diameters of the wheels 48
 115 and the pinion 72 is such that a considerable movement of the web from the machine effects only a relatively slight movement of the rack 71 and that this ratio may be ar-
 120 ranged for any desired relation between the movements of the rack 71 and the web.

Carried by the member or guide 70, see especially Figures 21 to 25, is an electric
 125 switch 73 of the standard type having an operating rod 74 extending therethrough. This switch in its specific construction forms no part of my invention but is such a switch
 130 as may be bought at any electrical supply house, the rod 74 being pushed in one direction to close the switch and in the other direction to open the switch. Carried by the rack 71 in the preferred form as shown in Figures 4 and 5 and also in Figures 24 and 25 is a
 135 vertical rack bar 75 having a guide slot 76 extending through the rack teeth on its inner side and receiving the pin 77 of a slider 78. This slider has extending upwardly there-
 140 from a switch operating member or post 79. Also at the forward end of the bar 75 is a second post or stop 80, these posts being located in such position that movement of the rack forwardly causes the post 79 to engage
 145 the rod 74 and close the switch while rear-

ward movement causes the post 80 to engage said rod and open the switch. A spiral spring 81 mounted in the spring box 82 carried by the member 70 urges the rack to retracted position so that the switch is normally held open. Pivoted to the slider 78 is a latch lever 83 which, as can be seen in Figure 25, is so arranged that it may be swung into and out of position between adjacent teeth of the rack 75 and thus enable the slider and post 79 to be adjusted relative to the switch 73. Preferably the latch 83 is provided with some suitable means as the weight 84 to hold it in latching position and the teeth of the rack 75 are also preferably formed to readily permit engagement of the latch 83 between adjacent teeth.

In the form of the device shown in Figures 21, 22 and 23 the rack 71 has a lateral extension 85 from which projects a pin 86 moving in a slot 87 formed in the outer wall of the channel 70. Also this channel 70 is provided at its bottom with anti-friction rollers 88. On top of the lateral extension 85 are formed a series of spaced holes 89 and there is provided a post 90 corresponding to the post 79 and having a foot 91 engageable in a selective hole. This post 90 further carries a fine adjustment screw 92 since the holes 89 are too widely spaced to afford necessary adjustment by the post only.

Under these circumstances it will now be noted that as the tape is drawn off and the rack moves forward this forward motion will continue until the switch 73 is closed. If at this time the cutter be operated the wheels are unclutched from the shaft and the latter left free to turn so that the spring 81 retracts the rack and causes engagement by the post 89, or in the form shown in Figure 21, by the post 93 thus opening the switch.

At the rear of the machine behind the rear wall 12 there is mounted an iron clad solenoid 94 having a core 95 which is connected by an arm 96 with a yoke 97. The arms of this yoke extend forwardly through guides 98 and are pivotally connected to levers 99 which are pivoted at their lower ends to the lower part of the side walls of the body or base and have forked upper ends 100 receiving the studs 101 on the knife frame 58 so that as the solenoid is energized the levers 99 will be thrust forwardly and thus swing the knife frame from upright inactive position to horizontal active position. One side of the switch is connected by a wire 102 with said solenoid while the other side of the switch is connected by a wire 103 with a socket 104, a wire 105, connecting the other terminal of the solenoid with said socket and fuses 106 being suitably interposed in said wires. By means of the socket connection may be made to any desired source of current. Consequently, movement of the web out of the machine and the closing of the switch 73 effects energiza-

tion of the solenoid and the cutter frame operates to cut off the proper length of the web. Obviously, adjustment of the switch closing post causes the cutting off to take place at the instant the desired length of web has been withdrawn. Now, as previously described, when the frame moves forward the wheels are unclutched by the action of the solenoid is such that the cutting off takes place so rapidly that the severing is fully accomplished before the switch is opened. Obviously, when the switch is opened the solenoid will be de-energized and the parts returned to normal position.

The knife frame is provided with a hand operating handle 107 so that the device may be used, if desired, without reference to the electric mechanism, the latter either being disconnected or the hand operation taking place before the sufficient web has been drawn off to close the switch.

Covering the gearing is a forward hood 108 and to the forward end of this hood is hinged a swinging guard plate 109 which has its downwardly extending portion provided with a pair of slidable extensions 110 so arranged that they work over the forward cover portion 16 in contact therewith and thus protect the operator's fingers from the knives, the plate swinging forwardly as the knife frame swings in the same direction. This plate is provided with a slotted rear extension 111 engaging around the handle 107 so that return of the knife frame to normal or inactive position likewise permits return of the guard plate to normal or rearward position.

In order to provide guide means for the forwardly moving web the platen 22 is provided with spaced longitudinally extending grooves 112 in its upper surface at each side and these grooves terminate forwardly in through slots 113. At the rear end adjacent each groove is a pin hole 114. Guide bars 115, see Figure 17, are seated in these grooves, the bars being inserted in selected grooves and at their forward ends these bars are provided with downwardly and forwardly offset portions 116 while at the rear end they are provided with finger grips 117 having lateral extensions 118 which project beneath the openings or holes 114, these extensions being provided with suitable openings to receive cotter pins 119. In adjusting the bars the cotter pins are withdrawn and the bars drawn rearwardly until the extensions 118 disengage from beneath the platen 22 at which time the forward extensions 116 will also have disengaged from beneath the platen whereupon the bars may be raised and replaced in such other position as may be desired.

At the forward end of the body there is provided the usual moistening brush 120 and just to the rear of this brush is a well cover or protecting pan 121 having its side edges

flanged to rest on pins or screws 122, the rear wall being provided with a key hole slot 123 engaging a screw 124. This pan protects the tab forming lever and prevents moisture from reaching the underside of the gummed tape.

The operation of the device, having been described in detail, it is not necessary here to again go into a particular description of this operation but it is thought simply necessary to say that the switch closing post, having been adjusted for the required length the upstanding tab formed from the last severing of the web is grasped and the web drawn forward. This effects forward movement of the switch closing post which closes the switch and causes operation of the cutter, the post moving mechanism being unclutched at this time and moving back to its normal position whereupon the circuit through the electrical mechanism is opened and all parts restored to their normal position.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material spirit thereof. It is not, therefore, desired to confine the invention to the exact form herein shown and described, but it is desired to include all such as properly come within the scope claimed.

Having thus described the invention, what is claimed as new, is:

1. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a web length controlling mechanism including a switch closing member, a switch controlling said means and located in the path of said member, and means carried by said member and moving therewith to engage said switch and open the same upon effective operation of said cutter.

2. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a web length controlling mechanism including an adjustable switch closing member, a switch controlling said means and located in the path of said member, means to secure said switch closing member in adjusted relation to said switch whereby to control the length of web cut off, and means carried by said member and moving therewith to engage said switch and open the same upon effective operation of said cutter.

3. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage

and close the switch, and means to hold said member in adjusted position on the bar.

4. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said member in adjusted position on the bar, means to retract said bar after cutting of the web, and a switch opening member on the bar and engaging the switch to open the same upon retraction of the bar.

5. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar, gearing for driving said bar and including a driving gear engaged and rotated by the web upon delivery thereof whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, and means to hold said member in adjusted position on the bar.

6. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar, gearing for driving said bar and including a driving gear engaged and rotated by the web upon delivery thereof whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said member in adjusted position on the bar, means to retract said bar after cutting of the web, and a switch opening member on the bar and engaging the switch to open the same upon retraction of the bar.

7. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar, a driving gear engaged and rotated by the web upon delivery thereof, a driven gear, a releasable clutch connecting said gears, means controlled by the movement of the cutter to cutting position to open said clutch, a rack on the bar engaged by the driven gear whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, and means to hold said member in adjusted position on the bar.

8. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a

circuit through said means, a reciprocable web length measuring bar, a driving gear engaged and rotated by the web upon delivery thereof, a driven gear, a releasable clutch connecting said gears, means controlled by the movement of the cutter to cutting position to open said clutch, a rack on the bar engaged by the driven gear whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said member in adjusted position on the bar, means to retract said bar after cutting of the web, and a switch opening member on the bar and engaging the switch to open the same upon retraction of the bar.

9. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said member in adjusted position on the bar, a spring connected to said bar and urging the bar to retracted position, and a switch opening member on the bar and engaging the switch to open the same at the end of the retractile movement of said bar.

10. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar, gearing for driving said bar and including a driving gear engaged and rotated by the web upon delivery thereof whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said member in adjusted position on the bar, a spring connected to said bar and urging the bar to retracted position, and a switch opening member on the bar and engaging the switch to open the same at the end of the retractile movement of said bar.

11. In a web dispensing machine, a web cutter, electrical operating means for the web cutter, a switch for closing and opening a circuit through said means, a reciprocable web length measuring bar, a driving gear engaged and rotated by the web upon delivery thereof, a driven gear, a releasable clutch connecting said gears, means controlled by the movement of the cutter to cutting position to open said clutch, a rack on the bar engaged by the driven gear whereby the bar is movable in one direction by movement of a web from the machine, a switch closing member carried by the bar and movable with the bar to engage and close the switch, means to hold said

member in adjusted position on the bar, a spring connected to said bar and urging the bar to retracted position, and a switch opening member on the bar and engaging the switch to open the same at the end of the retractile movement of said bar.

12. In a web dispensing machine, the web to be dispensed having longitudinally spaced perforations; a web length regulating device having an actuating wheel provided with teeth engaging the web perforations, an electromagnetically operated cutter and switch therefor, a movable switch closing bar including a variably positionable switch closing finger, and an operative connection between the wheel and bar to move the latter as the wheel is rotated, whereby dispensing movement of the web effects operation of the length regulating device.

13. In a web dispensing machine for dispensing a web having longitudinally spaced perforations; a cutter for severing the web into predetermined lengths upon movement of the web out of the machine, electro-magnetic means for actuating said cutter, a switch controlling said means, a reciprocable web length measuring bar having switch operating means to engage the switch and open the same upon protraction of the bar and having other switch operating means to close the switch upon retraction of the bar, and means to protract said bar including a toothed wheel having its teeth engaged in said perforations.

14. In a web dispensing machine for dispensing a web having longitudinally spaced perforations; a cutter for severing the web into predetermined lengths upon movement of the web out of the machine, electro-magnetic means for actuating said cutter, a switch controlling said means, a reciprocable web length measuring bar having switch operating means to engage the switch and open the same upon protraction of the bar and having other switch operating means to close the switch upon retraction of the bar, means to protract said bar including a toothed wheel having its teeth engaged in said perforations, means releasably connecting said wheel and bar and operable to free the bar from action by the wheel after closing of said switch, and a spring urging said bar to retracted position.

15. In a web dispensing machine for dispensing a web having longitudinally spaced perforations; a cutter for severing the web into predetermined lengths upon movement of the web out of the machine, electro-magnetic means for actuating said cutter, a switch controlling said means, a reciprocable web length measuring bar having switch operating means to engage the switch and open the same upon protraction of the bar and having other switch operating means to close the switch upon retraction of the bar, said first switch operating means being adjustably movable along the bar to regulate the length

of web severed and having means for securing it in adjusted position, and means to protract said bar including a toothed wheel having its teeth engaged in said perforations.

16. In a web dispensing machine for dispensing a web having longitudinally spaced perforations; a cutter for severing the web into predetermined lengths upon movement of the web out of the machine, electro-magnetic means for actuating said cutter, a switch controlling said means, a reciprocable web length measuring bar having switch operating means to engage the switch and open the same upon protraction of the bar and having other switch operating means to close the switch upon retraction of the bar, said first switch operating means being adjustably movable along the bar to regulate the length of web severed and having means for securing it in adjusted position, means to protract said bar including a toothed wheel having its teeth engaged in said perforations, means releasably connecting said wheel and bar and operable to free the bar from action by the wheel after closing of said switch, and a spring urging said bar to retracted position.

17. In a web dispensing machine, a platen over which the web travels in movement from the machine, a swinging cutter frame having its lower edge portion pivoted just above said platen, said frame being movable between upright inactive position and forwardly extending horizontal cutting position, and a swinging guard having its upper edge portion pivoted to the machine above the cutter frame and hanging in suspended position in front of said frame whereby cutting movement of the frame effects forward swinging movement of the guard.

18. In a web dispensing machine, a platen over which the web travels in movement from the machine, a swinging cutter frame having its lower edge portion pivoted just above said platen, said frame being movable between upright inactive position and forwardly extending horizontal cutting position, a swinging guard having its upper edge portion pivoted to the machine above the cutter frame and hanging in suspended position in front of said frame whereby cutting movement of the frame effects forward swinging movement of the guard, and an extension plate vertically slidably on said guard and having its lower edge resting on said platen.

19. In a web dispensing machine, a web cutter including a movable knife frame, electro-magnetic means connected to said frame to actuate the same, a switch controlling said means, a reciprocable rack bar carrying spaced switch closing and opening means, a pinion engaging the bar to drive the same in one direction, a shaft carrying the pinion, an actuating wheel on the shaft revoluble with respect to the pinion and engaged and rotated by the web delivered from the machine,

a clutch on said shaft arranged to cause the wheel and pinion to revolve in unison when in clutching position, said clutch including a member movable between clutching and unclutching positions, a shipper lever for moving said clutch member, and a cam on said lever engaged by the knife frame to cause movement of the clutch member in one direction.

20. In a web dispensing machine, a web cutter including a movable knife frame, electro-magnetic means connected to said frame to actuate the same, a switch controlling said means, a reciprocable rack bar carrying spaced switch closing and opening means, a pinion engaging the bar to drive the same in one direction, a shaft carrying the pinion, an actuating wheel on the shaft revoluble with respect to the pinion and engaged and rotated by the web delivered from the machine, a clutch on said shaft arranged to cause the wheel and pinion to revolve in unison when in clutching position, said clutch including a member movable between clutching and unclutching positions, a shipper lever for moving said clutch member, a cam on said lever engaged by the knife frame to cause movement of the clutch member in one direction, and a spring urging said clutch member in the opposite direction.

21. In a web dispensing machine, a web cutter including a movable knife frame, electro-magnetic means connected to said frame to actuate the same, a switch controlling said means, a reciprocable rack bar carrying spaced switch closing and opening means, a pinion engaging the bar to drive the same in one direction, a shaft carrying the pinion, an actuating wheel on the shaft revoluble with respect to the pinion and engaged and rotated by the web delivered from the machine, a clutch on said shaft arranged to cause the wheel and pinion to revolve in unison when in clutching position, said clutch including a member movable between clutching and unclutching positions, a shipper lever for moving said clutch member, a cam on said lever engaged by the knife frame to cause movement of the clutch member in one direction, and a spring urging said bar in the opposite direction to its movement by said pinion.

22. In a web dispensing machine, a web cutter including a movable knife frame, electro-magnetic means connected to said frame to actuate the same, a switch controlling said means, a reciprocable rack bar carrying spaced switch closing and opening means, a pinion engaging the bar to drive the same in one direction, a shaft carrying the pinion, an actuating wheel on the shaft revoluble with respect to the pinion and engaged and rotated by the web delivered from the machine, a clutch on said shaft arranged to cause the wheel and pinion to revolve in unison when in clutching position, said clutch in-

cluding a member movable between clutch-
ing and unclutching positions, a shipper lever
for moving said clutch member, a cam on
said lever engaged by the knife frame to
cause movement of the clutch member in one
5 direction, a spring urging said clutch mem-
ber in the opposite direction, and a spring
urging said bar in the opposite direction to
its movement by said pinion.

23. In a web dispensing machine, a cutter
10 mechanism, electric means for operating the
cutting mechanism including a switch, a re-
ciprocating bar movable under the influence
of web withdrawn from said machine, a
15 switch engaging member slidably mounted
on said bar to close the switch, a locking rack
on said bar, and a latch pivoted to the switch
engaging member and movable into and out
of selected spaces between the rack teeth to
20 secure the member in adjusted position.

24. In a web dispensing machine, a cut-
ter mechanism, electric means for operating
the cutting mechanism including a switch, a
reciprocating bar movable under the influ-
25 ence of web withdrawn from said machine,
a switch engaging member slidably mount-
ed on said bar to close the switch, a lock-
ing rack on said bar, a latch pivoted to the
switch engaging member and movable into
30 and out of selected spaces between the rack
teeth to secure the member in adjusted posi-
tion, and a switch opening member mount-
ed on said bar in spaced relation to the switch
closing member.

35 In testimony whereof I affix my signature.
WILLIAM A. UTTZ, SR.

40

45

50

55

60

65