June 23, 1953 L. H. SEMLER 2,642,936

DISPENSER FOR EJECTING AND SEVERING GUMMED TAPE

Filed May 12, 1951 5 Sheets-Sheet 1

Fig. 1

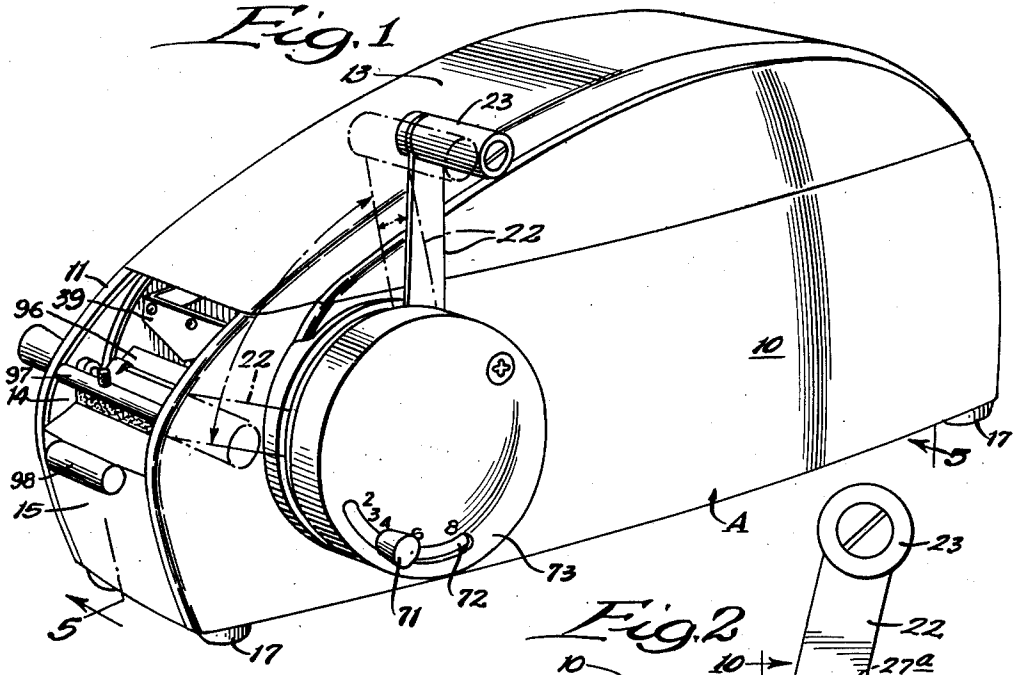


Fig. 2

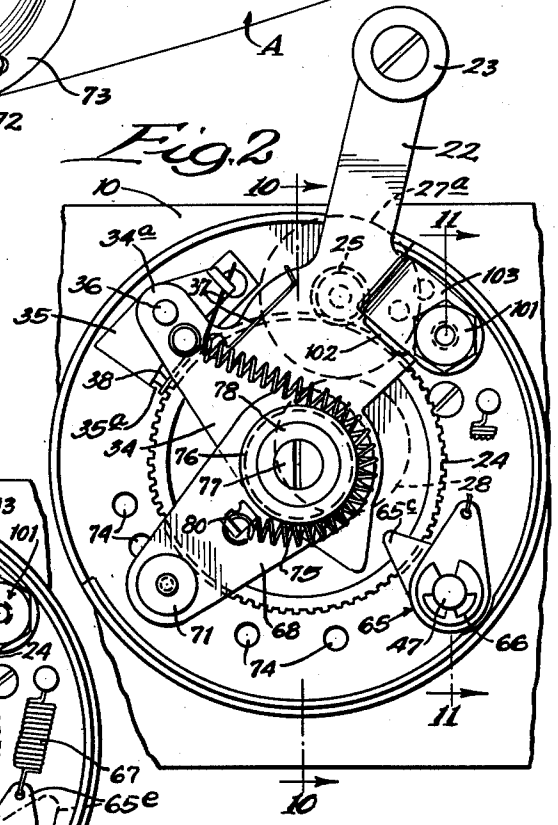
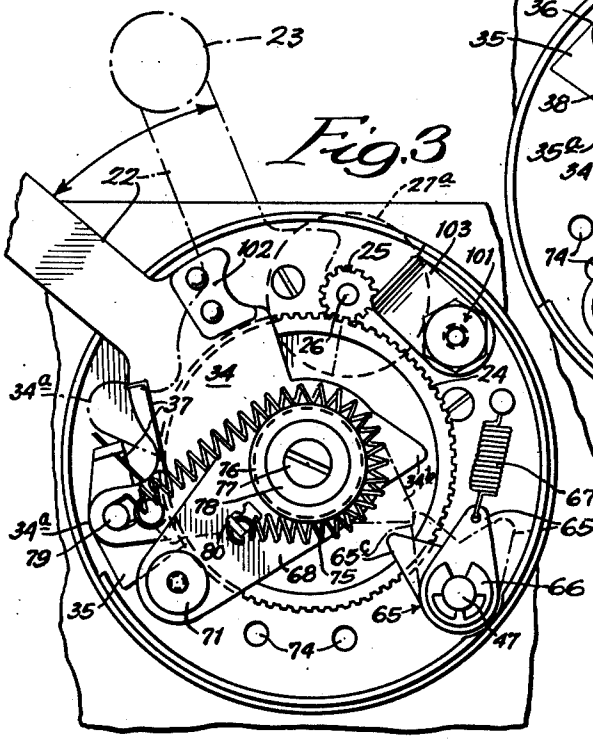


Fig. 3



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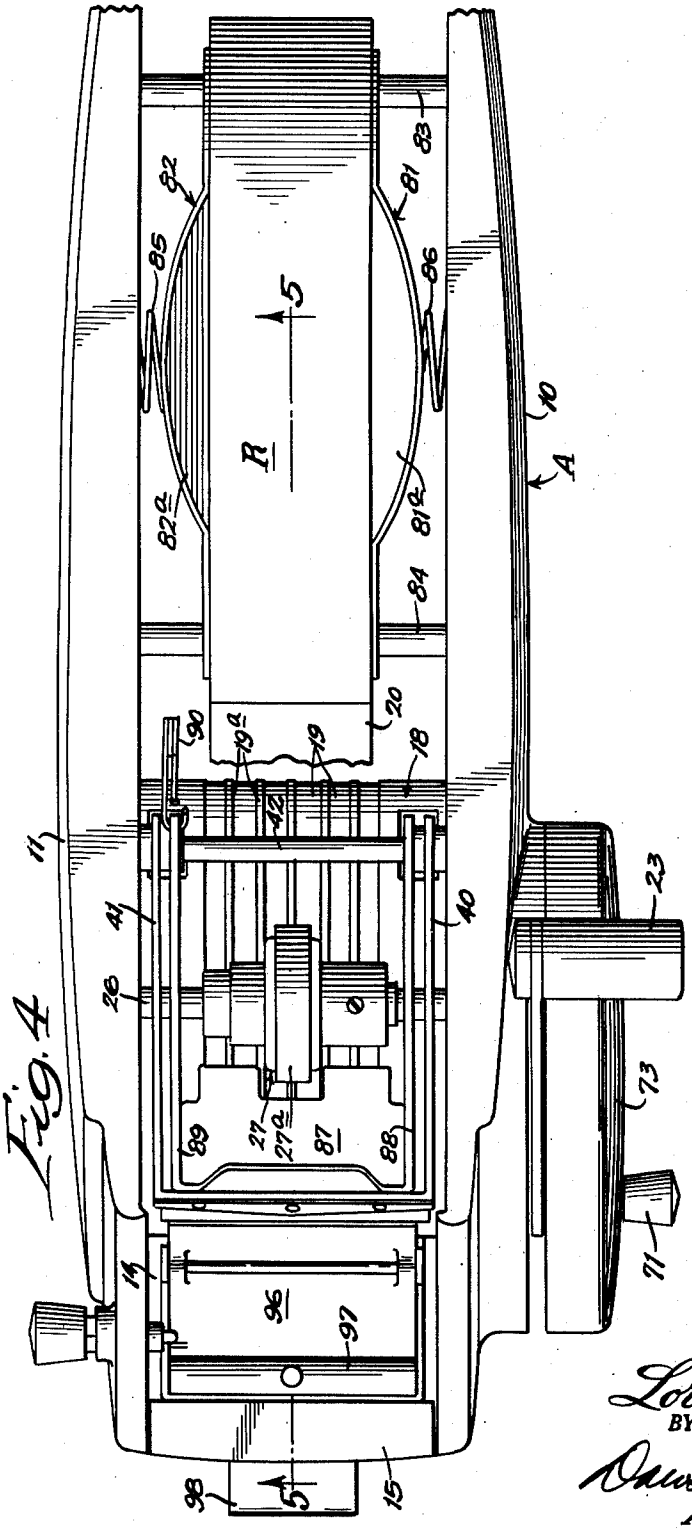


Fig. 4

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DISPENSER FOR EJECTING AND SEVERING GUMMED TAPE

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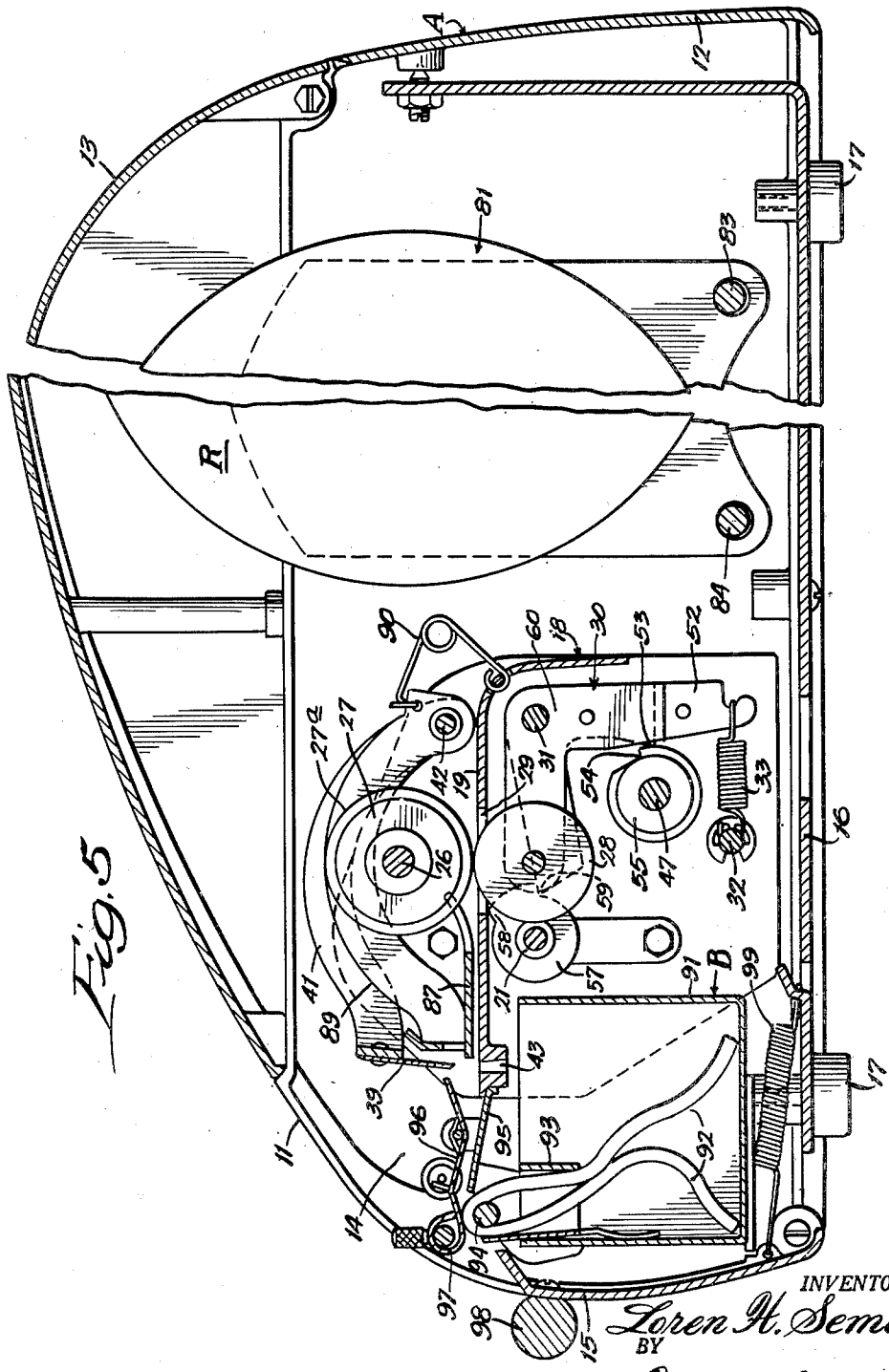


Fig. 5

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DISPENSER FOR EJECTING AND SEVERING GUMMED TAPE

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Fig. 6

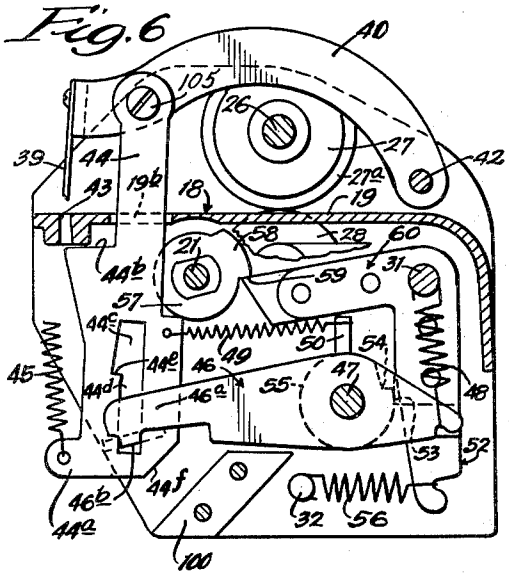


Fig. 7

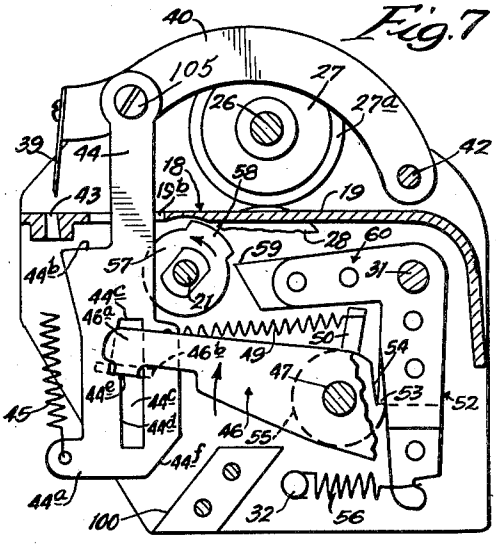


Fig. 8

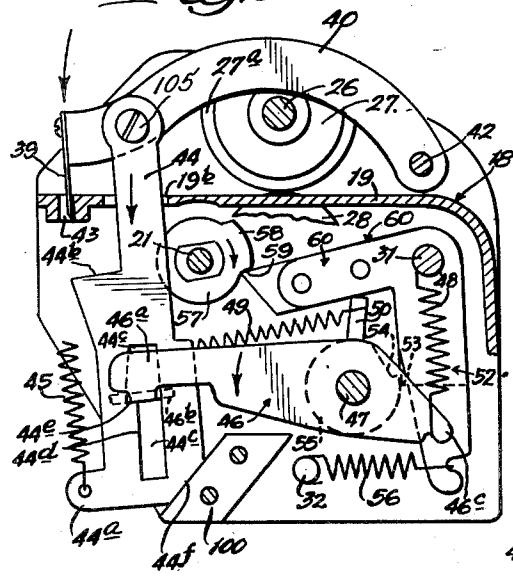
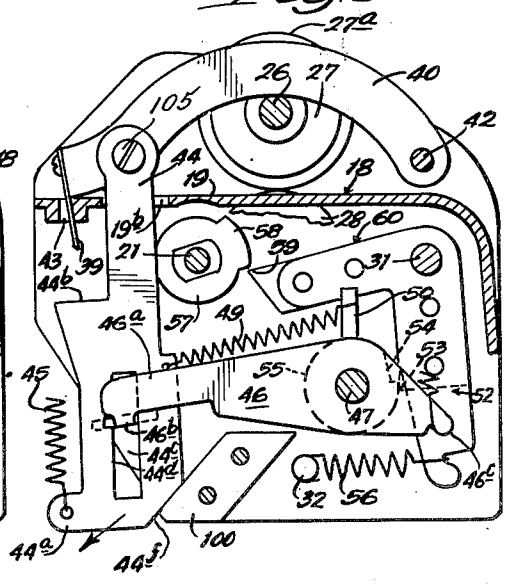


Fig. 9



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DISPENSER FOR EJECTING AND SEVERING GUMMED TAPE

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Fig. 10

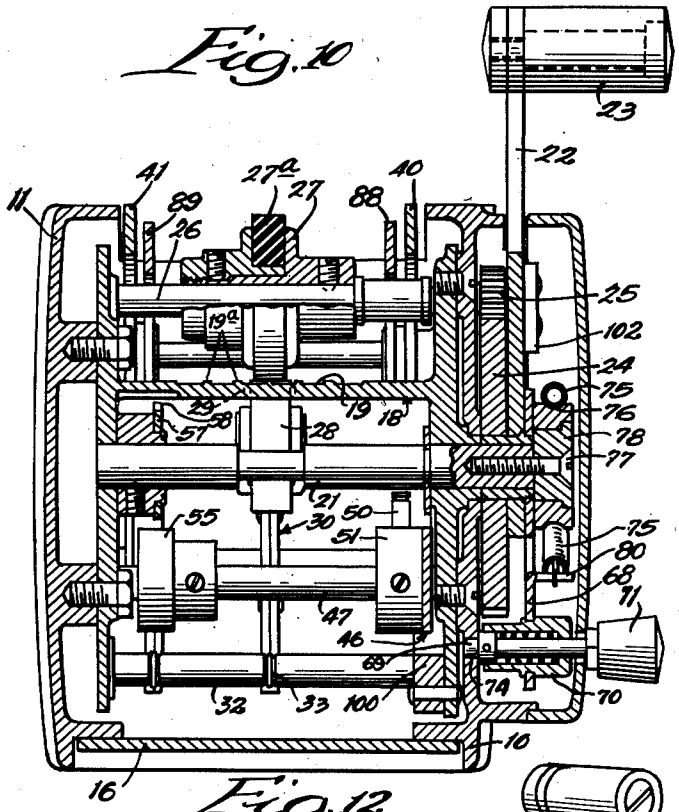


Fig. 11

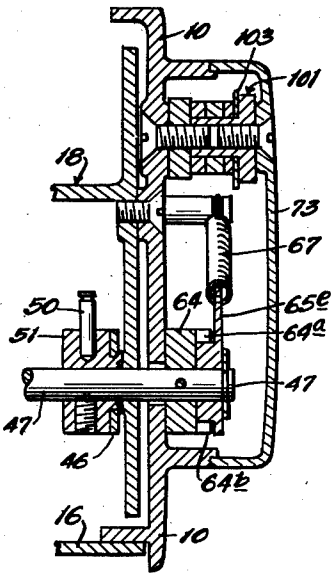


Fig. 12

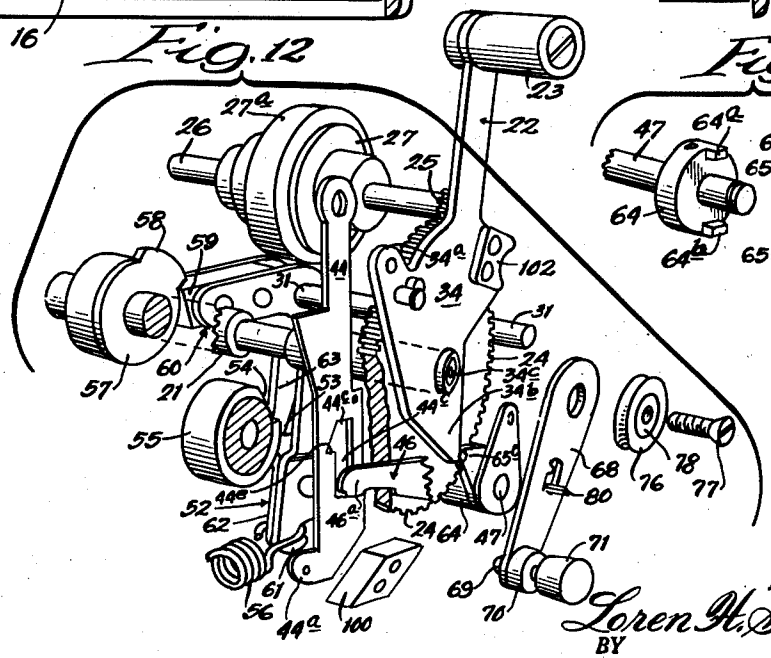


Fig. 13

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Patented June 23, 1953 2,642,936

UNITED STATES PATENT OFFICE

2,642,936

DISPENSER FOR EJECTING AND SEVERING GUMMED TAPE

Loren H. Semler, Chicago, Ill., assignor to Metal Specialties Manufacturing Co., Chicago, Ill., a corporation of Illinois

Application May 12, 1951, Serial No. 225,940

12 Claims. (Cl. 164—42)

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My invention relates to a gummed tape dispenser adapted to serve moistened strips of gummed paper for use in wrapping packages, etc. My invention can also be employed in machines for serving strips of ungummed paper, or in machines wherein gluing fluid is applied to the ejected strips. My invention also has utility in other related applications.

It is a general object of my invention to improve the operation of strip serving machines of the type having a rockably mounted operating lever adapted to propel a strip along an established path upon movement of the handle in one direction to eject a portion of the strip, and having a movably mounted knife blade normally retracted from the path of travel of the strip and adapted to sever the ejected portion of the strip when moved across the path.

More specifically, it is an object of my invention to provide a strip serving machine, or more specifically a gummed tape dispenser, in which the mechanism for cutting the ejected strip portions is made to cooperate in a new and highly advantageous manner with the strip-feeding mechanism to accomplish, among other results, the exact measurement of the severed strips in any desired length. In this connection, it is an object of my invention to develop a new mechanical cooperation between the cutting mechanism and the strip-feeding mechanism by means of which the cutting mechanism is cocked during the initial part of the ejecting stroke of the operating lever, while the major portion of the strip is ejected during the latter portion of the ejecting stroke, and wherein the operating lever can be oscillated within and over the latter part of the ejecting stroke to increase the length of the ejected strip to any desired length by stopping the lever at any point and allowing it to return to its initial position. Further, it is an object of my invention to have the cocked knife blade tripped by the return movement of the handle as it approaches its starting position. In combination with means for accomplishing this operation, it is also an object of my invention to provide adjustable stop means for limiting the length of the ejecting stroke of the operating lever so that a variety of selected and uniform strip lengths can be dispensed, say in selectable 2, 3, 4, 6, and 8'' lengths.

Another important objective of my invention is to provide means for making the cutting action of the knife blade completely independent of the speed of movement of the operating lever on the return stroke in order to maintain uniform cutting at all times and to keep the knife blade sharp longer. It is a further and related object of my invention to provide means for automatically returning the operating lever to its starting position on release thereof by the operator in combination with a stop means for catching the released handle and holding it in the starting position without bouncing. It is a still further object of my invention to provide means for disengaging the pawl from the ratchet-wheel just before the operating lever reaches its starting position on being released so that the operating lever must be moved forwardly a short distance before the feeding mechanism begins to be operated in order that accidental contact with the operating lever will not begin to eject the tape. Further objects and advantages will appear as the specification proceeds.

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My invention is shown in a preferred embodiment in the accompanying drawings in which—

Figure 1 is a perspective view of the exterior of a gummed tape dispenser embodying my invention; Fig. 2, a detail side view of the external operating mechanism with the cover plate removed showing the operating handle in starting position; Fig. 3, a view similar to Fig. 2 showing the position of the operating lever in the latter portion of the ejecting stroke and in dotted lines the position of the operating handle when the knife blade becomes cocked; Fig. 4, a plan view of the dispenser of Fig. 1 with the cover removed and the rear portion of the casing broken away; Fig. 5, a longitudinal sectional view taken in elevation on line 5—5 of Fig. 4 broken away through the tape roll to permit the operating mechanism in the forward portion to be enlarged; Fig. 6, a side detail view of the cocking and tripping mechanism showing the portion of the parts at the beginning of the ejecting stroke; Fig. 7, a view similar to Fig. 6 showing the position of the parts upon the cutting mechanism becoming cocked; Fig. 8, a view similar to Figs. 6 and 7 showing the position of the parts after the cutting mechanism has been tripped and the knife blade has begun to be pulled downwardly; Fig. 9, a view similar to Fig. 8 showing the position of the parts just after the operating link has been cammed out of interlocking engagement with the actuating arm; Fig. 10, a front sectional view taken on line 10—10 of Fig. 2 showing the general transverse relationship of the parts; Fig. 11, a detail front sectional view taken on line 11—11 of Fig. 2; Fig. 12, a perspective view of the main operating parts of the feeding and cutting mechanism with the casing

and supporting frame removed showing some of the parts in separated relation; and Fig. 13, a perspective detail view of the finger-like cam and shaft collar cooperating therewith on the end of the cocking shaft showing some of the parts in separated and rotated relation.

In the illustration given, my tape serving machine as seen more clearly in Figs. 1, 4, and 5 has a casing A with an open top and front providing side walls 10 and 11 and rear wall 12. A cover 13 is hinged to the rear wall of casing A and extends forwardly to a spaced distance from the open front end of casing A to provide an open throat portion 14 through which the tape strips are ejected. A door 15 is pivoted at its bottom edge so as to normally close the open front end of casing A below 14, while permitting the insertion and removal of the moistener device B. A bottom closure plate 16 equipped with downwardly extending supporting legs 17 is secured to casing A.

Within the forward portion of casing A there is mounted an H-frame or housing 18, as shown more clearly in Figs. 4, 5, and 10 to house and support the feeding and cutting mechanisms, and for other purposes. In the illustration given, the upper horizontal surface 19 of the transverse web of H-frame 18 provides a bed or trackway over which strip 20 from roll R is conveyed to be ejected through throat 14. If desired, bed 19 can be provided with longitudinal ribs 19*a* to assist in guiding strip 20 and prevent the gummed underside of tape 20 from adhering to the bed.

Within the lower portion of H-frame 18 there is journaled an oscillating main shaft 21, as seen more clearly in Fig. 10. Main shaft 21 extends through side wall 10 and has operating lever 22 rigidly mounted on the projecting end thereof by means of which shaft 21 can be oscillated. Preferably, the upper end of operating lever 22 is equipped with a laterally extending rotatably mounted knob 23 to assist in moving operating lever 22 so as to produce accurate cutting of the ejected strops, and to permit operation by either a right-handed or left-handed person. Between side wall 10 and operating lever 22 there is journaled on shaft 21 a ratchet-wheel 24, as shown more clearly in Fig. 10. In the illustration given, ratchet-wheel 24 consists of a spur gear adapted to drive pinion 25 which is rigidly mounted on the end of feed roll shaft 26 which is journaled in the top portion of H-frame 18. Feed roll 27 is rigidly mounted in a central position on shaft 26. If desired, feed roll 27 can be equipped with a rubber tire 27*a* adapted to coact with the spring-pressed idle feed roll 28. In the illustration given idle feed roll 28 extends slightly above bed 19 through longitudinal slot 29, as seen more clearly in Figs. 5 and 10, and is journaled between the forked upper arms of bell crank 30. Bell crank 30 is pivotally mounted on fixed shaft 31 and the lower end thereof is urged toward transverse mounting rod 32 by tension spring 33, and thereby idle roll 28 is maintained in frictional driving engagement with feed roll 27.

In the illustration given, operating lever 22 has an enlarged head 34 of generally triangular shape providing at the upper outer corner a pawl mounting projection 34*a* extending above the periphery of ratchet-wheel 24. A pawl 35 having a tip 35*a* adapted to engage the teeth of ratchet-wheel 24 is pivotally secured to projection 34*a* by pin 36 and with tip 35*a* biased toward ratchet-wheel 24 by spring 37. Thus, when operating lever 22 is swung forwardly or in a counter-clockwise direction as viewed in Figs. 2 and 3, tip 35*a* seats in the depression between two teeth of ratchet-wheel 24 and thereby rotates ratchet-wheel 24 in a counter-clockwise direction. This motion of ratchet-wheel 24 rotates pinion 25 in a clockwise direction, thereby feeding the tape between rolls 27 and 28 through throat 14. On the return stroke or swing, tip 35*a* slides over the teeth of ratchet-wheel 24, allowing ratchet-wheel 24 to remain stationary so that strip 20 also remains stationary and is not ejected during the return stroke of the operating lever.

Preferably, there is provided a pawl lifter 38 to lift tip 35*a* out of contact with ratchet-wheel 24 just before operating lever 22 is returned to its starting position. Lifter 38 thus serves to prevent the engagement of pawl 35 with ratchet-wheel 24 and the consequent ejection of strip 20 until lever 22 has been displaced from its starting position. This feature is desirable because it prevents the starting of the ejection of strip 20 by accidentally brushing or otherwise contacting operating lever 22.

Any suitable means can be provided for movably mounting knife blade 39 in a normally retracted position with respect to the path of travel along which strip 20 is propelled to be ejected through throat 14 so that when knife blade 39 is moved across the path the ejected portion of strip 20 will be severed. In the illustration given, knife blade 39 is mounted on the forward ends of arched arms 40 and 41 which have their other ends pivotally mounted on fixed shaft 42 which is supported above the rear of bed 19 by the upper portion of H-frame 18. Knife blade 39 coacts with the rear edge of transverse slot 43 across the front of bed 19 to shear the tape 20. Preferably, blade 39 is triangular in shape with the apex of the triangle providing a central point. It has been found that the shearing action is improved by employing a blade of this nature moving in a generally vertical plane with the point downwardmost.

An operating link 44 extends downwardly below blade 43 through a longitudinal slot 19*b* in bed 18 and can be connected thereto by any suitable means permitting link 44 to pivot with respect to blade 39. In the illustration given, operating link 44 is pivotally connected to arm 40 just back of blade 39 by pivot pin 105. Operating link 44 is spring biased upwardly by spring 45 secured to the toe 44*a* of link 44. Preferably, means is provided for limiting the uppermost position of link 44, such as shoulder 44*b* which is adapted to engage the underside of the transverse web of H-frame 18.

A pivoting actuating arm 46 is rigidly mounted on cocking shaft 47 which is journaled in H-frame 18 having an end extending through side wall 10 at a spaced distance from the periphery of ratchet-wheel 24, as shown more clearly in Figs. 2 and 3. Thus, the clockwise rotation of shaft 47, as viewed in Figs. 6 to 9, elevates the forward end 46*a* of actuating arm 46, and thereby causes end 46*a* to move upwardly relative to operating link 44.

Any suitable means can be provided for causing end 46*a* to interlock with lever 44 at a point spaced above the bottom thereof. In the illustration given, the lower portion of arm 44 has a longitudinal slot 44*c* adapted to provide a longitudinal track 44*d* on the forward face thereof. At an intermediate point, track 44*d* has a notch 44*e* providing a transverse shoulder at the bottom thereof. Correspondingly, end 46*a* of ac-

tuating arm 46 has a laterally extending finger 46b adapted to seat on the shoulder provided by notch 44e so as to interlock arm 46 and link 44 for downward movement when track 44d is pressed against finger 46b. If desired, finger 46b can be made T-shaped to prevent disengagement from the slot 44c during the sliding movements of finger 46b on track 44d.

End 46a is downwardly biased and normally maintained in the position shown in Fig. 6 by tension spring 48 which has its lower end secured to rearward extension 46c of arm 46 and its upper end secured to fixed shaft 31, as shown more clearly in Figs. 6 and 8. It will be understood that spring 48 is considerably stronger than spring 45 so that when spring 48 is pitted against spring 45 by the interlocking of arm 46 and link 44 spring 45 will be elongated and link 44 will be pulled downwardly to actuate knife blade 39. In order to maintain finger 46b and track-face 44d in sliding engagement as arm extension 46a is elevated so as to seat finger 46b in notch 44e, a tension spring 49 is connected between link 44 and pin 50 extending upwardly from collar 51 which is rigidly mounted on cocking shaft 47. This is shown more clearly in Figs. 6 to 9 and in Fig. 10. Thus, when cocking shaft 47 is rotated in a clockwise direction, as viewed for example in Fig. 6, pin 50 through spring 49 urges link 44 rearwardly into engagement with arm 46. When arm extension 46a has been elevated with respect to slot 44c to the point illustrated in Fig. 7, finger 46b seats on the lower shoulder of notch 44e to interlock link 44 and arm 46 .

Any suitable means can be provided for latching arm 46 in the elevated interlocked position shown in Fig. 7. In the illustration given, there is provided a latch lever 52 which is pivotally mounted on fixed shaft 31 and extends downwardly behind cocking shaft 47. The forward face of latch lever 52 is provided with a cam-engaging projection 53 which is adapted to be received within notch 54 of cam 55 which is rigidly mounted on cocking shaft 47 so as to lock the cocking shaft against counter-clockwise rotation, as viewed in Figs. 6 to 9. Projection 53 is urged against the periphery of cam 55 by tension springs 56 which is secured between transverse rod 32 and the lower end of latch lever 52. Thus, when cocking shaft 47 is rotated to elevate arm 46 to interlock arm 46 and link 44, projection 53 rides against the periphery of cam 55 from the position shown in Fig. 6 until it reaches the position shown in Fig. 7 at which time it seats within notch 54 to latch arm 46 in its elevated and interlocked position of Fig. 7. In actual operation, it has been found preferable to have the parts dimensioned so that link 44 and arm 46 interlock just ahead of the latching of arm 46 by tip 53 entering notch 54.

Any suitable means can be provided for tripping the latching means which has just been described. However, it is preferable that the means employed operate to trip the latching means during the latter part of the return movement of operating lever 22. In the illustration given this is accomplished by rigidly mounting cam 57 on the main shaft 21 and providing cam 57 with a normally rearwardly extending projection 58 adapted to engage tip 59 of trip arm 60 which is, in the illustration given, an integral extension of latch arm 52. Thus, in the illustration given, latch arm 52 and trip arm 60 are in reality a bell crank. If desired, latch arm 52 and trip arm 60 can be fabricated from side members 61 and 62 being riveted to core member 63, as shown more clearly in Fig. 12.

Any suitable means can be provided for causing operating lever 22 to rock cocking shaft 47 in a clockwise direction (Figs. 6 to 9) during the first part of the forward swing of operating lever 22 to cock the cutting mechanism. Preferably, however, the enlarged head 34 of operating lever 22 provides a tapered finger 34b normally extending downwardly toward cocking shaft 47. Spaced from the outer end of cocking shaft 47 there is rigidly mounted a collar 64 having oppositely-disposed outwardly extending lugs 64a and 64b providing a socket to receive the rear portion of cam 65 which is pivotally mounted on shaft 47 within the socket provided by lugs 44a and 44b, being secured on shaft 47 by lock washer 66, as seen more clearly in Figs. 2, 3, and 13. The rear portion of cam 65 is provided with notches 65a and 65b (Fig. 13) providing shoulders at each end thereof adapted to engage lugs 64a and 64b to limit the rotation of cam 65 with respect to shaft 47. The forward portion of cam 65 provides a normally upwardly extending tapered finger 65c lying in the path of movement of finger 34b so as to be engaged thereby during the first portion of the forward movement of handle 22. In the normal starting position, shoulder 65d is in engagement with lug 64a, being maintained in this position by equalizer spring 67 which is secured to upward extension 65e of cam 65, as seen more clearly in Figs. 3 and 11.

In the illustration given and preferably, there is provided adjustable stop means for limiting the length of the ejecting movement of operating lever 22. This is accomplished by pivotally mounting stop arm 68 on hub 34c (as seen more clearly in Fig. 12) and equipping the outer end of arm 68 with an inwardly extending movable pin 69 sliding in sleeve 70 being urged inwardly by a spring within sleeve 70 (not shown). The outer end of pin 69 can be equipped with a knob 71 adapted to extend through slot 72 in cover plate 73 for seating pin 69 in one of the holes 74 in side wall 10 (Figs. 1, 2, and 3).

In order to automatically return operating lever 22 to its initial position after it is swung forwardly to eject a portion of strip 20, a strong spring 75 (Figs. 2, 3, and 10) is provided which is wrapped around pulley-collar 76 with the ends respectively secured to button 79 on operating lever 34a and fastener 80 on stop arm 68. Collar 76 is rotatably mounted on the end of main shaft 21 by screw 77 and locking sleeve 78 (Figs. 2, 3, and 12). Any suitable means can be provided for rotatably mounting roll R in the rear of the compartment provided by casing A. Preferably, roll R is rotatably supported between movable plates 81 and 82 which are slidably mounted on transverse rods 83 and 84, as shown more clearly in Figs. 4 and 5. In the illustration given and preferably, plates 81 are urged together by springs 85 and 86, which serve to hold roll R in a centered position. For the insertion or removal of roll R, plates 81 and 82 are pulled apart at their top by grasping thumb flanges 81a and 82a (Fig. 4). To assist in holding tape 20 as it travels over bed 19, there can be provided a floating presser plate 87. In the illustration given, presser plate 87 (Figs. 4 and 5) is mounted in alignment with bed 19 on the ends of arched arms 88 and 89 which have their other ends pivoted on fixed shaft 42. Presser plate 87 is urged into loose engagement with bed 19 by means of spring 90 acting on arm 89 to

urge it downwardly toward bed 19. In the forward portion of casing 19 accessible through door 15 there is provided a water cup 91 having a capillary moistener member 92 extending upwardly therefrom through holder 93 and around pin 94 to provide a moistening surface in front of support plate 95. In the illustration given, there is provided a pivoted presser plate 96 having a curled and weighted forward end 97 normally resting on the top of moistener member 92. If desired, door 15 can be equipped with a knob 98 and a spring 99 to assist in opening and closing the door.

Operation

The operation of my machine can be briefly described as follows: Roll R is inserted between plates 81 and 82, and strip 20 is fed over bed 19 between rollers 27 and 28 to knife blade 39. With the strip in this position, the ejection of strips of measured length or of any desired length can be carried out. Handle 22 is swung forwardly to engage pawl 35 with ratchet-wheel 24, and to engage finger-like cams 34*b* and 65*c*. From this point on further forward movement of handle 22 causes the rotation of feed roll shaft 26 so that the strip is ejected through throat 14 and cocking shaft 47 is rotated by the engagement of cams 34*b* and 65*c*. The initial position of the cutting mechanism elements is shown in Fig. 6. From this position the rotation of shaft 47 elevates arm 46 until it is interlocked with link 44, and until latch lever 52 is engaged with cam 55 to latch arm 46 in its elevated position. This position is shown in Fig. 7. The position of the operating lever 22 and cams 34*b* and 65*c* just after the cutting mechanism has become cocked is shown in Fig. 3 in dotted lines. It will be apparent that the required movement of operating lever 22 to accomplish this result is only over the first portion of the forward swing.

After the cocking of the cutting mechanism, operating lever 22 can be swung forwardly until stopped by pin 69, which has been previously set to eject the desired measured length of gummed strips. Also, if desired operating lever 22 can be oscillated within and over the forward portion of the swing to dispense longer lengths of tape or strips of a particular length not obtained by the setting of pin 69. At any time that it is desired to sever the tape, it is only necessary to release operating lever 22. On the turn stroke of operating lever 22 tape is not dispensed because pawl 35 slides over ratchet-wheel 24.

Just before lever 22 reaches the end of its return stroke and is returned to its initial position, projection 56 of cam 57 engages tip 59 of trip arm 60. Trip arm 60 is thereby rotated downwardly which moves latch arm 52 rearwardly and disengages projection 53 from notch 54. This frees cocking shaft 47 to rotate and allow arm 46 to pull lever 44 downwardly over the action of spring 48. The position of the parts after a portion of this downward movement has been accomplished is shown in Fig. 8. In this view, knife blade 39 has begun to sever tape 20, having entered slot 43.

To disengage arm 46 from link 44 to allow the parts to return to their starting position, there is provided an inclined cam plate 100 which is mounted below link 44 so as to be engaged by the scarfed heel 44*f* after blade 39 has moved downwardly sufficiently far to sever tape 20. The position of the parts at the time of the engagement of heel 44*f* with inclined cam plate 100 is

shown in Fig. 8. The force of the downward movement of arm 44 causes arm 44 to travel downwardly to the position shown in Fig. 9 where it has been moved forwardly against spring 49 to disengage finger 46*b* from notch 44*e*. Spring 45 will then serve to lift lever 44 and knife blade 39 to return the parts to the starting position shown in Fig. 6.

It is desirable to provide a stop means adapted to catch lever 22 on its return to starting position to prevent any rebound of the lever. In the illustration given, this is accomplished by mounting a post 101 so that it is abutted by a portion of lever 22 in its starting position. If desired, a stop lug 102 can be mounted on head 34 to engage post 101. It is also desirable to provide a spring catch 103 adapted to engage the outer surface of stop lug 102 and mounted on the outer end of post 101.

While in the foregoing specification I have set forth specific details of my invention for purpose of illustration, it will be apparent to those skilled in the art that many of these details can be varied without departing from the spirit of my invention.

I claim:

1. In combination with a strip serving machine having a rockably mounted operating lever adapted to propel a strip along an established path upon movement of the handle in one direction to eject a portion of said strip and a movably mounted knife blade normally retracted from said path and adapted to sever the ejected portion of said strip when moved across said path, an improved operating mechanism for said knife blade comprising an operating link extending from said knife blade and connected thereto by means permitting said link to pivot with respect to said blade, a pivotally mounted actuating arm aligned with said link so as to move toward said blade along said link when rotated in one direction, said link and said arm being adapted to interlock when pressed into engagement at a point when said arm is moved closer to said blade than its normal position, said arm being spring biased to normally maintain said arm further away from said blade than said interlocking position, spring means for urging said ink against said arm when said arm is moved toward said blade from its normal position, means actuated by the ejecting movement of said handle to move said arm toward said blade until said arm interlocks with said link, means for latching said arm in said interlocked position, and means actuated by the return movement of said handle for tripping said latching means to free said arm to allow said arm through said link to move said knife blade across said path.

2. In combination with a strip serving machine having a rockably mounted operating lever adapted to propel a strip along an established path upon movement of the handle in one direction to eject a portion of said strip and a movably mounted knife blade normally positioned above said path so as to sever the ejected portion of said strip when moved downwardly across said path, an improved operating mechanism for said knife blade comprising an operating link extending downwardly from said knife blade and connected thereto by means permitting said link to shift with respect to said blade, said link providing a longitudinal track having a notch therein above the lower end thereof, a pivotally mounted actuating arm having an extension sliding on said track and into said notch, said arm exten-

sion being spring biased to normally maintain said extension below said notch, spring means for urging said track against said extension when said extension is elevated, means actuated by the the ejecting movement of said handle to elevate said arm until said extension catches within said notch to interlock said link and arm, means for latching said arm in said elevated and interlocking position, and means actuated by the return movement of said handle for tripping said latching means to free said arm to move downwardly together with said interlocked link so as to snap said knife blade across said path.

3. The combination of claim 2 in which there is also provided means for disengaging said arm and link after said knife blade has been moved across said path.

4. In combination with a strip serving machine having a rockably mounted operating lever adapted to actuate a feeding mechanism through a pawl and ratchet-wheel interposed therebetween to propel a strip along an established path upon movement of the handle in one direction from a starting position but not upon the return movement of said handle in the opposite direction, said strip serving machine also having a movably mounted knife blade positioned above said path and adapted to sever a portion of said strip when moved downwardly across said path, an improved operating mechanism for said knife blade comprising an operating link extending downwardly from said knife blade and connected thereto by means permitting said link to pivot with respect to said blade, said link having a longitudinal track with a notch therein providing a retaining-shoulder above the lower end of said track, a rockably mounted cocking shaft spaced from said link, an actuating arm rigidly mounted on said cocking shaft and having an extension in close proximity with said track, said arm extension sliding on said track and catching said notch by resting on said shoulder, spring means associated with said arm and cocking shaft for normally maintaining said extension below said notch, other spring means for urging said track against said extension when said extension is elevated on said track, means actuated by the first part of the ejecting movement of said handle to rotate said cocking shaft in a direction to elevate said arm until said extension seats on said shoulder to interlock said link and arm, said last-mentioned means being adapted to disengage from said handle immediately after the point at which said arm and link interlock, means for latching said arm in said elevated and interlocked position, and means actuated by the last portion of the return movement of said handle for tripping said latching means to free said arm to move downwardly directly with said interlocked link so as to snap said knife blade across said path, whereby precisely measured strip portions of any desired length can be dispensed from said machine.

5. The combination of claim 4 in which there is also provided means for disengaging said arm and link after said knife blade has been pulled below said path, said disengaging means including an inclined cam surface positioned below said link, so as to cam said link forwardly when pulled downwardly thereagainst to disengage said link and arm.

6. The combination of claim 4 in which there is also provided adjustable stop means to limit the length of the ejecting swing of said handle, whereby a strip portion of predetermined length can be dispensed by said machine by swinging said operating lever from its initial position directly against said stop means and then returning said handle to its initial position.

7. The combination of claim 4 in which there is also provided spring means for effecting the automatic return of said operating lever to its initial position upon being released at any point in its ejecting swing.

8. The combination of claim 4 in which the means for actuating said cocking shaft comprises a finger-like cam rigidly secured to said operating lever and extending toward said cocking shaft, and a second finger-like cam mounted on the end of said cocking shaft and extending into the path of travel of said first-mentioned finger-like cam during the first part of the swing of said handle, said cam carried by said cocking shaft being locked to said shaft against rotation thereon in the direction of movement of said operating level cam and being dimensioned to swing out of engagement with said operating lever cam during the first part of the ejecting swing of said operating lever.

9. The combination of claim 4 in which said knife blade is formed with two inclined cutting edges meeting to form a point, and in which said blade is mounted on the ends of pivotally mounted arched arms for movement in a generally vertical plane across the path of travel of said strip.

10. The combination of claim 8 in which said latching means comprising a cam having a notch therein rigidly mounted on said cocking shaft, a latch arm pivotally mounted adjacent said cam, said latch arm providing a tip adapted to interlock with said cam notch and positioned to ride against the periphery of said cam and into said notch, and spring means for urging said latch arm against said cam.

11. The combination of claim 10 in which said tripping means comprises a trip arm rigidly connected to the pivotally mounted end of said latch arm to form a bell crank therewith, said trip arm providing a cam-engaging tip, and a rotatably mounted cam having a projection thereon adapted to engage said tip to rotate said trip arm and thereby said latch arm to disengage said latch arm from said cocking shaft cam, and means for actuating said cam to effect its engagement with said trip arm during the last part of the return movement of said operating lever.

12. The combination of claim 4 in which there is also provided stop means adjacent the initial position of said operating lever having a spring catch associated therewith adapted to receive said operating lever so as to prevent it from rebounding on being released at the end of the ejecting swing and rapidly returned to the starting position.

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