

March 15, 1932.

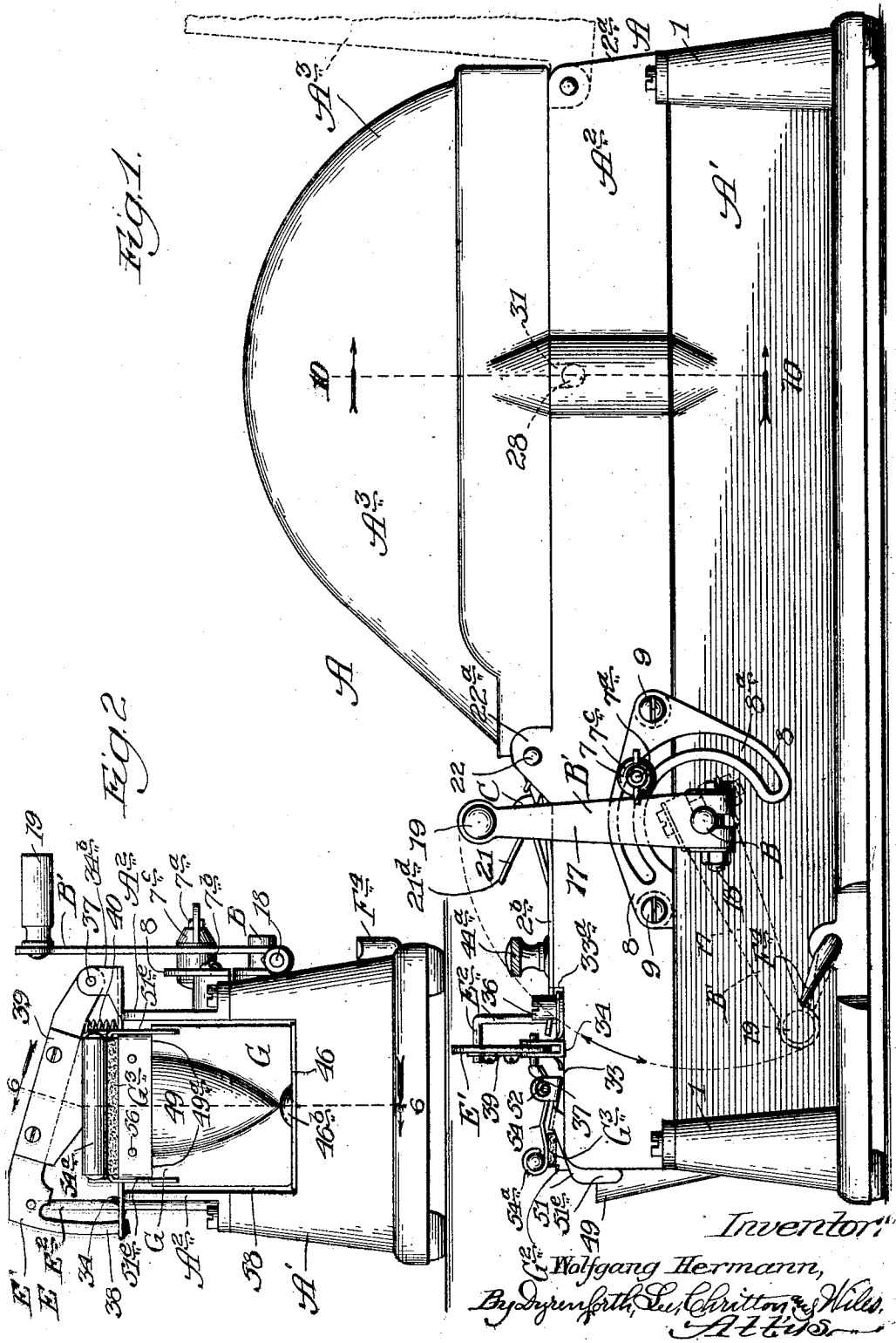
W. HERMANN

1,849,759

STRIP SERVING MACHINE

Filed Dec. 27, 1926

5 Sheets-Sheet 1



March 15, 1932.

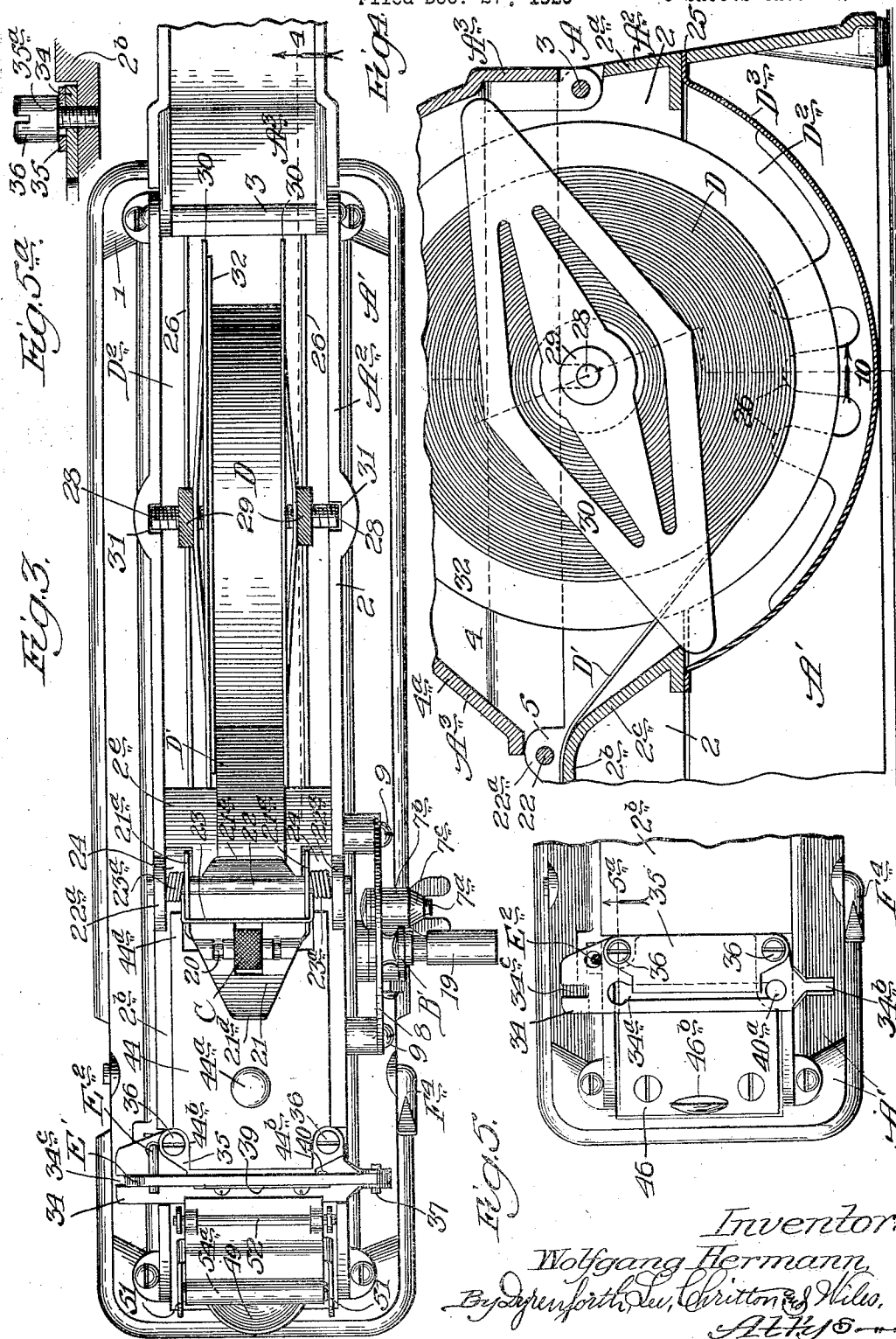
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5 Sheets-Sheet 2



March 15, 1932.

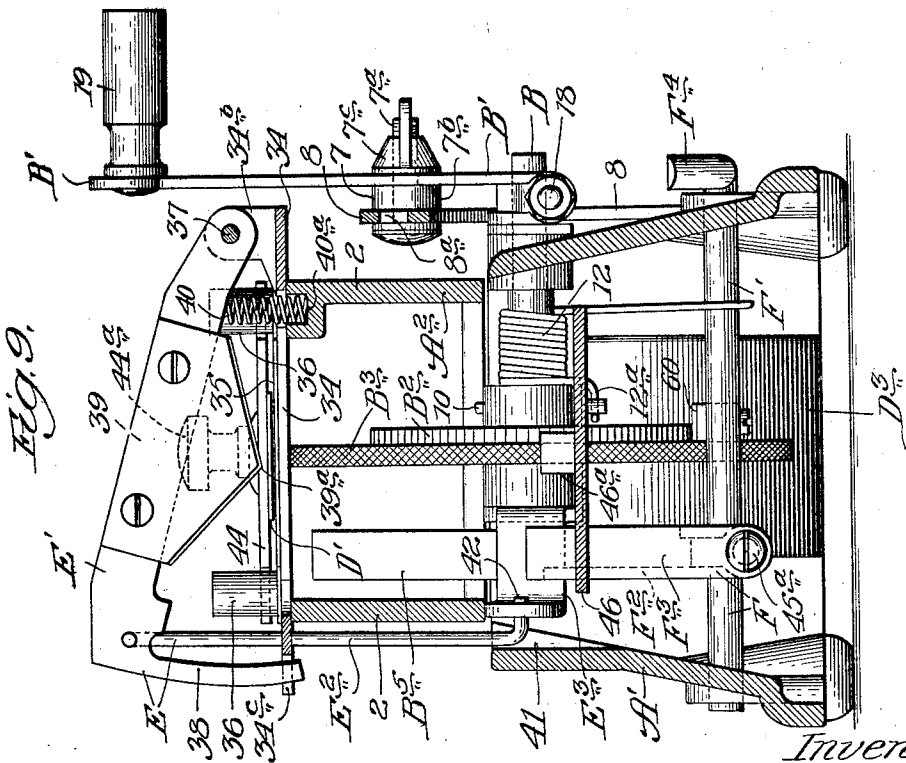
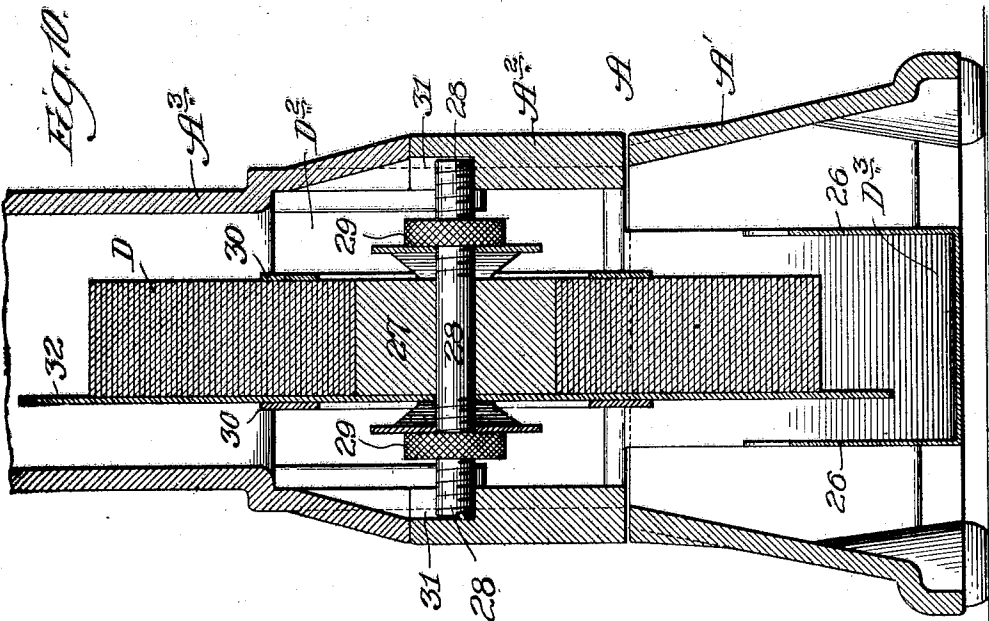
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STRIP SERVING MACHINE

Filed Dec. 27, 1926

5.Sheets-Sheet 4



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UNITED STATES PATENT OFFICE

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STRIP-SERVING MACHINE

Application filed December 27, 1926. Serial No. 157,201.

This invention relates particularly to strip-serving machines, especially adapted to the purpose of serving gummed tape. If desired, the machine may be used to serve an ungummed strip, in which case the moistening device illustrated may be replaced by any suitable adhesive-applying device.

The primary object is to provide a strip-serving machine of improved general construction which is adapted to serve tape and sever the same in any desired length.

The invention is illustrated in its preferred embodiment in the accompanying drawings, in which—

Fig. 1 represents a side elevational view of the improved machine, the broken dotted lines indicating the open position of a cover employed; Fig. 2, a front end elevational view of the machine; Fig. 3, a plan view of the machine showing the cover brokenly in open position; Fig. 4, a broken vertical sectional view taken as indicated at line 4 of Fig. 3; Fig. 5, a broken plan view of the front end of the machine; Fig. 5^a, a detail sectional view taken as indicated at line 5^a of Fig. 5; Fig. 6, a broken longitudinal sectional view on an enlarged scale taken as indicated at line 6—6 of Fig. 2; Fig. 7, a broken plan view showing a detail of the cutter-actuating device; Fig. 8, a broken vertical sectional view taken as indicated at line 8—8 of Fig. 7; Fig. 9, a transverse vertical sectional view taken as indicated at line 9 of Fig. 6; Fig. 10, a broken transverse vertical sectional view taken as indicated at line 10 of Fig. 4; Fig. 11, a broken sectional view similar to Fig. 8, but showing the parts in a different position; Fig. 12, a sectional view taken as indicated at line 12 of Fig. 11; Fig. 13, a perspective view of one of the washers employed, as indicated in Fig. 11; Fig. 14, a perspective view of a water-font employed; Fig. 15, a perspective view, partly in section, showing a unit comprising a capillary moistener-element, its holder, and a pivotally mounted presser-member mounted on said holder; Fig. 16, a broken sectional view illustrating a modification of the main feed-wheel and its actuating device; Fig. 17, a broken sectional view taken as indicated at line 17 of Fig. 6; and

Fig. 18, a perspective view showing a clip, or spring-holder, with which the oscillating main shaft of the machine is equipped.

In the preferred construction which is illustrated, A designates a frame, or casing, comprising a base member A', a surmounting member A² rigidly secured thereon, and a cover A³ pivotally connected with the rear end of the member A²; B (Figs. 9 and 17), an oscillatable main shaft journaled in the member A' and equipped with an actuating handle B'; B², a ratchet-wheel fixedly mounted on the shaft B adjacent the longitudinal center of the machine; B³, a feed-wheel journaled on the shaft B adjacent the ratchet-wheel; B⁴, a spring-fastener securely mounted on the shaft B and equipped with a resilient arm B⁵, shown as a pack of leaf-springs (Fig. 11); C (Figs. 3 and 6), a spring-pressed idle feed-roll which co-acts with the feed-wheel B³; D, a roll of gummed tape mounted in the rear portion of the casing A, from which the strip D' of paper passes to the feed-rolls; E, cutting mechanism comprising a cutter-equipped lever E', a link E², and an actuating lever E³ which has its rear end journaled on the shaft B and which is adapted to be actuated by the resilient arm, or spring, B⁵, as illustrated in Fig. 11; F, a latch device for the lever E³, said latch device comprising a rock-shaft F', a latch arm F², a spring F³, and a trip-arm F⁴; G, a water-font removable through the open front end of the casing; and G' a unit comprising a holder G², a capillary moistener member G³ adjustably mounted therein, and a pivotally mounted presser member G⁴ which co-acts with the upper end of the member G³.

In the embodiment of the invention shown, the frame A is composed of elongated hollow castings mounted one upon another. The main part of the frame comprises the base casting A' and the surmounting casting A². The cover A³ is used to enclose the chamber which holds the roll of tape, and may be omitted, if desired. The casting A' comprises a perimetral wall which provides side walls and end walls. The casting is open at the top and at the bottom. It is equipped

with lugs 1 for connection with the casting A².

The casting A² comprises side walls 2, a rear end wall 2^a, and a top wall 2^b which connects the upper edges of the side walls in front of the cover A². The top wall 2^b terminates at its rear end in a downwardly and rearwardly extending web 2^c (Fig. 4) which extends between the side walls 2.

The cover A³ is connected at its rear end by a pivot 3 with the rear upper portion of the casting A². The cover is in the form of a hollow casting which presents side walls 4 and a curved top wall 4^a which also forms the front and rear walls of the cover. The lower edges of the side walls 4 of the cover rest upon the upper edges of the side walls 2 of the casing A². The front wall of the cover is cut away to provide a space 5 which forms with the wall 2^b a throat through which the paper strip D' extends. The junction between the top wall 2^b of the front end of the casting A² and the web 2^c is suitably rounded to permit the paper strip to slide freely. As shown in Fig. 6, the top wall 2^b is provided with a longitudinal slot 2^d into or through which the upper portion of the feed-wheel B³ extends. It will be understood that the upper surface of the wall 2^b serves as a bed, or guide-plate, over which the paper strip D' slides while being served from the machine.

The main actuating shaft B is journaled in bearings 6 (Fig. 17) with which the casting A' is provided. The actuating handle B' bears normally against an adjustable stop 7 mounted on a sector 8 which is attached to one side wall of the casting A² as by means of screws 9. The ratchet-wheel B² is equipped with a hub which is secured by means of a pin 10 to the shaft B. A spacing-sleeve 11 is interposed between said hub and the adjacent bearing 6. About the sleeve 11 is wound a spring 12 which has one end 12^a engaging the pin 10. The other end 12^b of the spring is connected with the shaft F' of the latching device F, as shown in Fig. 6.

The feed-wheel B³ is of large diameter and extends through the slot 2^d of the top wall 2^b. As shown in Fig. 17, the feed-wheel is provided with a hub, and the rear end of the lever E³ of the cutter-mechanism is joined on the shaft B adjacent said hub. The spring-fastening device B⁴ is rigidly secured to the shaft, and a washer 13 is interposed between it and the pivoted portion of the member E³.

This spring-fastening comprises a sheet-metal loop 14 which is bent into U-shape, thus providing the sides 14^a and the web 14^b. The shaft B extends through the side members 14^a, and is secured with respect to the loop by means of a small bolt 15 which is interposed between the web 14^b and the shaft, the shaft being provided with a trans-

verse groove which receives a portion of the bolt 15. Washers 16 are applied to the end portion of the bolt 15, these washers having tabs 16^a which extend into the space between the side members 14^a. One of these washers (Fig. 18) is equipped with lugs 16^b which afford a socket receiving one end of the pack of leaf-springs B⁵. The bolt 15 extends through the springs, and the springs are clamped in position, as will be understood from Fig. 11. It will be observed that it is impossible for the spring-shackle B⁴ to shift in any direction with relation to the shaft B; also, it will be understood from Fig. 17 that after the parts have been assembled, it is impossible for the shaft B to shift longitudinally with relation to its bearings.

The handle B' in the form shown comprises a sheet-metal arm 17 having its attaching end slotted to form a loop and having the loop-portion folded into U-form and thus providing the spaced portions 17^a and 17^b and the web-portion 17^c. The folded slotted portion receives the projecting shaft B and is keyed thereto by a transverse bolt 18 which extends through the loop-end and a complementary transverse groove with which the shaft B is provided at the point 18^a. The handle is equipped at its free end with a knob 19.

The spring-pressed idle feed-roll C is journaled on a horizontal pin 20 (Figs. 3 and 6), carried by a sheet-metal member 21 which is provided at its lateral edges near its rear end with upturned lugs 21^a pivotally mounted on a shaft 22 whose ends are held by bearing lugs 22^a with which the frame member A² is equipped. The rear portion of the member 21 underlies the shaft 22, and the rear extremity of the member 21 is curved upwardly, as indicated at 21^b. The form is such as to provide the member 21 with a rounded angle 21^c between which and the rounded junction of the top wall 2^b and web 2^c is left a space, or slot, through which the paper strip B' can pass freely.

The lugs 21^a are engaged in front of the shaft 22 by the web-portion of a spring 23 which has coils 23^a encircling the shaft 22, the end-portions of the spring being extended downwardly through slots 24 with which the wall 2^b is provided. The spring 23 tends to hold the presser-roll C against the feed-roll B³. The front extremity of the member 21 is curved upwardly and affords a tab 21^d which may be engaged by the finger when it is desired to lift the presser-roll C away from the feed-roll. The bearing-lugs 21^a are equipped with depending projections 21^d which are adapted to engage the front walls of the slots 24, thus limiting the rearward swing of the member 21 and preventing the spring 23 from being injured.

As appears from Figs. 3, 4 and 10, the gummed tape roll D is received in a cham-

ber D² afforded by the rear portions of the casing members A' and A² and the cover A³. This chamber is provided with a bottom D³ which preferably is formed of sheet-metal and which is provided at points 25 with lugs which are clamped between the members A' and A². The member D³ is in the form of a segment and is equipped with lateral flanges 26 which are spaced apart a sufficient distance to accommodate the largest size roll which can be used in the machine. When a wide roll of tape is used, it is simply dropped into the chamber D² and is supported and held in upright position by the bottom D³. In the illustration given, a roll of narrow tape is shown. This roll is mounted on a core 27 carried by a shaft 28 which is equipped with threaded extremities upon which are mounted nuts 29 between which are disposed a pair of spring plates 30 which can be adjusted to cause the desired amount of friction upon the sides of the core 27, or upon the roll, or upon both. The plates 30 are of elongated form and fit freely within the chamber D², but do not rotate when the tape is withdrawn. The extremities of the shaft 28 are received in internal slots, or bearings, 31 with which the side walls of the intermediate casting A² are provided.

In the illustration given, the tape D' is assumed to be provided on its lower or outer side with an adhesive coating, and thus the strip passes from the lower edge of the roll, as illustrated in Fig. 4, so that the lower side of the strip will be brought properly into engagement with the moistening element which will be described later. Some manufacturers roll the tape with the adhesive side in. Where such a roll is employed in the machine, the roll is reversed and the tape is fed from the upper edge of the roll. In the example given, the roll is provided at one side with a pasteboard disk 32.

The cutting mechanism E will be understood by reference to Figs. 1-3, 5, 9 and 11. The front portion of the top wall 2^b of the casing A² is cut away, as indicated at 33, thus leaving a shoulder, as indicated at 33^a. Just in front of this shoulder there is mounted upon the upper edges of the side walls 2 of the casing A² a plate 34 which is provided with a slot 34^a which extends across the frame, as shown in Fig. 5. Upon the plate 34 is adjustably mounted a horizontal blade 35 which, as shown in Fig. 5^a, is provided with slotted openings 35^a. The horizontally disposed blade 35 and the underlying slotted plate 34 are secured to the frame member A² by means of cap screws 36, it being understood that the blade 35 can be adjusted forwardly or rearwardly. The front edge of the blade projects over a portion of the slot 34^a, as appears from Fig. 5.

The blade-carrying lever E' has one end mounted on a pivot 37 carried by lugs 34^b

with which the plate 34 is equipped at one end. The lever is provided at its other end with a segmental guide arm 38 which engages a guide slot 34^c with which the corresponding extremity of the plate 34 is provided. The lever E' is equipped at an intermediate point with a vertically disposed cutting, or punching, blade 39 which has beveled and tapered lower edge portions which meet at a downwardly directed apex 39^a. The purpose is to have the apex portion of the blade pierce the strip of paper at its center initially and then punch, or shear, the paper gradually as the lever descends. The blade 39 is adapted to work through the slot 34^a and to engage more or less closely the front edge of the horizontal blade 35. In adjusting the blade 35, the lever E' may be first depressed and the front edge of the blade 35 may then be set against the rear surface of the blade 39, as will be understood from Fig. 11.

The blade-carrying lever E' is normally held in elevated position by means of a small coil-spring 40 whose lower end sets in a socket 40^a with which the frame member A² is provided, as shown in Fig. 9. The upper end of the spring 40 bears against the lower edge of the member E' a short distance from the fulcrum 37.

The blade-carrying lever E' is adapted to be depressed through the medium of the link E² which works through a slot 41 with which the frame member A' is provided at the upper edge of one of the side walls. It will be observed that the frame member A² is somewhat narrower at this point than is the frame member A', so that the upper portion of the link E² is outside of the side wall 2. The lower end of the link E² is turned inwardly as indicated at 42 and engages a perforation with which the front end of the lever E³ is provided. As has been stated, the rear end of the lever E³ is pivoted on the actuating shaft B, as shown in Fig. 17. At an intermediate portion, the lever is bent to extend transversely, thus providing the transverse portion 43, which is adapted to be engaged by the leaf-spring B⁵, which is rigidly attached to the shaft B. The lever E³ normally is held in elevated position by the latch member F² during the serving of the strip from the machine, the spring B⁵ being placed under heavy flexure when the main actuating lever B' is swung forwardly in the direction indicated by the arrow in Fig. 1. At the end of the feeding of the strip from the machine, the hand-lever B' strikes the trip-arm F⁴ and releases the latch member F² from engagement with the portion 43 of the lever E³, thus permitting the spring B⁵ to quickly depress the lever E³. This carries the blade 39, by a sort of punching action, through the slot 34^a and thus causes the strip to be punched and sheared. It will be observed in Fig. 11 that the level of the upper surface of the blade 35

is slightly below the plane of the top surface of the wall 2^b. Also, that the plane of the upper surface of the blade 35 is slightly above the plane of the upper surface of the plate 34. This feature prevents the end of the strip from engaging the rear edge of the blade 35 and also from engaging the edge presented by the front wall of the slot 34^a as the strip is fed through the machine. In the shearing operation, there is a tendency to produce a very slight downturned fin at the front edge of the paper strip, and were it not for the fact that the surface in front of the blade 39 is depressed, difficulty might be experienced from the paper engaging the front wall of the slot 34^a.

As will best be understood from Figs. 3 and 6, a loose presser-plate 44 is located in front of the presser-roll C in position to hold the front end portion of the paper strip in close contact with the upper surface of the top wall 2^b. The plate 44 is equipped with a rigidly fastened knob 44^a by means of which the plate may be inserted or removed. The front end portion of the plate projects over a portion of the blade 35, and the front corners are cut away, as indicated at 44^b, to accommodate the cap-screws 36. At its rear end, the plate 44 is slotted centrally, as indicated at 44^c, to accommodate the presser-rolls C. This provides rearwardly extending furcations 44^b which project past the presser roll. The rear portion of the plate is curved upwardly, so that the paper strip E' will enter readily beneath the presser-plate. When desired, the presser-plate may be lifted freely from the bed of the machine to expose the paper strip. In threading the strip through the machine, the plate 44 is removed and the presser-roll C is lifted.

The rock-shaft F' of the latch mechanism F is journaled in the lower portion of the base-casting A', the trip-arm F¹ being disposed outside of the casting and in the path of the hand-lever B'. As shown in Fig. 12, the trip-arm F² is provided with a slotted loop 45 through which the shaft F' extends, and the arm is rigidly secured in position by means of a bolt 45^a. Suitable washers 45^b are provided for the bolt, as shown in Fig. 11. The spring F³ is secured to the rock-shaft by means of the bolt 45^a. The upper end of the spring F³ bears against the rear end of a sheet-metal platform 46 which, as shown in Fig. 6, is secured at its outer end to lugs 47 with which the frame member A' is equipped interiorly at its front end. The upper portion of the front wall of the member A' is cut away, as indicated at 48, and it will be remembered that the surmounting frame member A² is not provided with a front wall. Thus, the frame is left open at its front end to enable the water-font G to be inserted by horizontal movement.

The water-font and attendant parts will

be best understood by reference to Figs. 2, 6, 14 and 15. The font preferably is in the form of a rectangular box drawn from sheet brass and having the intermediate portion of its front wall bowed outwardly to provide an integral spout 49, flanked by wall sections 49^a.

The holder-element of the unit G' is adapted to engage the wall sections 49^a when the unit is depressed into the font. The holder G² is preferably so constructed as to enable it to hold a thin block of felt which preferably is of square contour, so that any edge of the felt block may be presented upwardly to the adhesive side of the gummed tape. The holder comprises a rectangular vertical frame member 50 which preferably is formed by bending a piece of sheet-metal to provide a front wall 50^a, edge walls 50^b, and inturned rear flanges 50^c. The capillary moistener-element G³ may be forced into the open-ended member 50, which really affords a peripheral wall, which does not, however, extend wholly across the rear surface of the block G³. Attached to the edge walls 50^b are the arms 51 of a sheet-metal bracket member which has a transverse web-portion 51^a disposed back of the plane of the felt block. At the ends of the web-portion are provided upturned ears 51^b which are provided with relatively large perforations 51^c. These perforations receive loosely the end portions of a small shaft, or wire, 52 whose intermediate portion is secured to eyes 53 punched from the sheet-metal member 54 which comprises a part of the presser-member G⁴. The member 54 is provided at its front edge with a roll, or hollow bead, 54^a in which is secured a metal rod 54^b which serves as a weight. The rear end margin of the member 54 is curved upwardly, as indicated at 54^c.

The arms 51 project in front of the wall 50^a and are provided with slots 51^d, thus affording hooks 51^e adapted to engage the wall-sections 49^a when the unit G' is inserted in the water-font. The arms 51 are so spaced as to lie closely adjacent the inner surfaces of the lateral walls of the font, so that the unit G' is amply secured in position by simply forcing it down into engagement with the walls at the rear portion of the font. It will be noted from Fig. 6 that there is provided a passage 55 between the web 51^a and the presser-member G⁴; also, it will be noted that the weighted front end of the presser-member is adapted to rest upon the upper edge of the felt block G³.

The felt block may be adjusted vertically with reference to its holder, and it may be securely held in adjusted position by means of pins 56, if desired. These pins are adapted to extend through holes 57 with which the web 50^a of the member 50 is provided.

After the unit, shown in Fig. 15, has been mounted on the font, shown in Fig. 14, these

parts may be introduced, as a unit, into the chamber 58, of which the member 46 forms the bottom. The member 46 is equipped at its rear end with a stop 46^a and at its front end with a stop 46^b. Thus, the bottom member

forms a socket which receives the bottom portion of the font and prevents the font from shifting forwardly or rearwardly. The position of the parts is such that when the font is in position, the rear edge of the web 51^a, which web is slightly inclined, is disposed adjacent the front edge of the plate 34. The web 51^a is thinner than the plate 34, so that the paper strip will slide freely off the plate 34 and onto the web. The inclined web 51^a tends to deflect the advance end of the strip upwardly somewhat. The strip then passes beneath the weighted portion of the plate 54 and is thereby held in contact with the upper edge of the capillary moistener-member G³. Fig. 6 represents the condition after the knife has been operated and the severed strip has been withdrawn. In the next forward swing of the hand-lever B', the paper strip will be fed forward and the advance end will enter the throat 55 and pass between the presser-member G⁴ and the upper edge of the felt block G³. It will be noted that the plate 54 has a forwardly and downwardly inclined portion 54^a which leaves an entrance angle above the rear upper corner of the felt pad. The advance end of the paper strip enters this angle and is deflected and thus caused to pass beneath the weighted front end of the presser-member G⁴.

The hand-lever B' which serves to actuate the feed mechanism is adapted to be thrown rearwardly by the spring 12, as will be readily understood from Figs. 1 and 9. The sector 8 is provided with a slot 8^a struck on a radius from the shaft B. The stop 7 is adjustable in said slot. The stop comprises a bolt 7^a which extends through the slot from the inner side of the segment and is equipped with a sleeve 7^b against which the hand-lever B' strikes at the end of its rearward stroke. The sleeve is secured in position and the bolt clamped to the segment by means of a wing-nut 7^c. The stop 7 can be adjusted to any desired position to enable a strip of any desired length to be served. It will be understood that the feed-wheel B² turns forwardly in the direction indicated by the arrow in Fig. 6 when the handle B' is swung forwardly in the direction indicated by the arrow in Fig. 1; and the feed-wheel remains idle while the handle swings rearwardly under the action of the spring 12, during which movement the ratchet-wheel B² is turned clockwise by the shaft B, as viewed in Fig. 6.

The feed-wheel B³ is equipped with a pawl 59 pivotally mounted on the wheel at 59^a. This pawl is engaged by a spring 60 mounted on the feed-wheel at the point 60^a. When

the ratchet-wheel B² is turned clockwise, as viewed in Fig. 6, the pawl rides freely over the ratchet-teeth. When the ratchet-wheel is turned counter-clockwise in the feeding movement, the feed-wheel is caused to turn counter-clockwise.

In Fig. 16, the ratchet-wheel is replaced by a toothless wheel B² whose periphery is engaged by a spring-pressed friction-pawl 59^b which operates like a ratchet.

The operation of the machine may be briefly stated: The roll of strip paper is mounted in the chamber D². If a narrow strip is employed, the roll is mounted on the shaft 28 and the ends of the shaft are journaled in the slots 31, as shown in Fig. 10. On the other hand, if a wide strip is employed, the shaft is omitted and the roll is simply dropped into the roll-support D³, and held in upright position by the flanges 26. The strip passes over the throat portion 2^c of the cast metal frame-member A² and beneath the guide-member 21 which is spring-pressed and which carries the idle feed-roll C. The strip then passes forwardly over the top-wall 2^b and beneath the floating presser-member 44. The forward feed of the strip is effected by means of the hand-lever B' which serves to turn the shaft B against the force of the spring 12. In the feeding operation, the strip D' is fed forwardly from the position shown in Fig. 6 and passes between the presser-member G⁴ and the upper edge of the capillary moistener-element G³. The gummed surface is effectively wetted during the passage. During the forward swing of the hand-lever B', the knife-actuating spring D⁵ is flexed, or placed under torsion, and thus tends to depress the lever E³ and throw the cutter-lever E' downwardly. This action is resisted by the latching device F until the hand-lever B' reaches the end of its forward swing, whereupon the hand-lever strikes the trip-arm F⁴, thus causing the lever E³ to be released. The spring B⁵ then throws the cutter-arm E' downwardly by a quick movement, and the pointed blade 39 thus is caused to pierce and sever the strip. The operator then withdraws the severed strip from the machine.

The machine described is thoroughly practicable and is reliable in its action. The strip-severing device E operates quickly and reliably by spring action, and the blade 39 works with a piercing action through the slot of the die-plate 34. The font G and attendant parts mounted thereon may be removed as a unit by lifting the front portion of the font slightly and then withdrawing the font through the open front end of the casing. This enables the font to be readily cleansed and the felt pad G³ to be cleansed and adjusted with facility. The water supply in the font can be replenished, however, without re-

moving the font from the machine, the spout 49 projecting sufficiently in front of the holder G² to enable water to be poured into the font.

5 The invention provides for due economy in the manufacture and assembly of the parts; provides against rust by the employment of non-rusting materials where exposed to moisture; and provides against leaving in the 10 machine any wetted portion of the strip. The danger of the parts becoming gummed, or fouled, is reduced to a minimum.

The foregoing detailed description has been given for clearness of understanding 15 only, and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible, in view of the prior art.

What I regard as new, and desire to secure 20 by Letters Patent, is:

1. In combination in a machine of the character set forth, an oscillatable shaft equipped with a strip-feeding wheel and a ratchet device interposed between said wheel and said 25 shaft; a spring adapted to throw said shaft in one direction; means for turning said shaft against the action of said spring; a cutter-actuating spring secured to said shaft; a normally retracted cutter-blade; actuating 30 means for said cutter-blade adapted to be actuated by said second-mentioned spring; and a trip-equipped latch device adapted to restrain said actuating means during the forward feed of the strip.

35 2. In combination in a machine of the character set forth, an oscillatable shaft equipped with a strip-feeding wheel and a ratchet device interposed between said wheel and said shaft; a spring adapted to throw 40 said shaft in one direction; means for turning said shaft against the action of said spring; a cutter-actuating spring secured to said shaft; a normally retracted cutter-blade; actuating means for said cutter-blade adapted 45 to be actuated by said second-mentioned spring; a latch device for said actuating means equipped with a trip-arm; and a member moving in co-ordination with said shaft adapted to strike said trip-arm at the con- 50 clusion of the strip-feeding operation.

3. In combination in a machine of the character set forth: a frame; a shaft jour- 55 nalled therein and equipped with a strip-feeding wheel journaled thereon; resilient means adapted to return said shaft to normal position after the strip-feeding operation; means for turning the shaft to effect feeding 60 of the strip; a ratchet device interposed between the shaft and strip-feeding wheel; a forwardly extending lever journaled on said shaft; a leaf-spring secured to said shaft and adapted to actuate said lever; a transversely 65 disposed cutter-lever linked to said first-named lever; a trip device comprising a shaft journaled in said frame in front of and be-

low said first-mentioned shaft and equipped with a latch-arm engaging said first-men- 70 tioned lever and equipped also with a trip-arm; and means co-ordinated in movement with relation to said first-mentioned shaft and adapted to strike said trip-arm at the con- 75 clusion of the forward feed of the strip.

4. In combination in a machine of the char- 80 acter set forth: a frame having a top-wall over which a strip may be fed, said top-wall being provided with a slot; a feed-wheel 85 journaled in said frame and extending into said slot; means for advancing the feed-wheel step by step; a member pivotally 90 mounted on said frame and equipped with an idle feed-roll co-acting with said feed-wheel, said member being provided with 95 strip-guiding means; and a spring engaging said member and serving to hold the idle feed-roll in contact with said feed-wheel. 100

5. In combination in a machine of the char- 105 acter set forth: a frame provided at its rear portion with a chamber adapted to receive a roll of strip material, said frame including 110 a casting provided with side walls, a top-wall, and an inclined web joining the rear portion of said top-wall and connecting said side walls, said top-wall being provided with 115 a slot; a strip-feeding wheel journaled in said frame in front of said inclined web and extending into said slot; means for intermit- 120 tently turning said feed-wheel; a spring-pressed strip-guiding member pivotally mounted upon said frame and forming with 125 said web and top-wall a throat through which the strip may pass; and an idle feed-roll journaled in said strip-guiding member and co-acting with said strip-feeding wheel. 130

6. In combination in a machine of the char- 135 acter set forth: a frame provided at its rear portion with a chamber adapted to receive a roll of strip material, said frame including a casting provided with side walls, a top-wall, and an inclined web joining the rear portion 140 of said top-wall and connecting said side walls, said top-wall being provided with a slot; a strip-feeding wheel journaled in said frame in front of said inclined web and extending into said slot; means for intermit- 145 tently turning said feed-wheel; a spring-pressed strip-guiding member pivotally mounted upon said frame and forming with 150 said web and top-wall a throat through which the strip may pass; an idle feed-roll journaled in said strip-guiding member and co-acting with said strip-feeding wheel strip- 155 severing means disposed in front of said feed-wheel; and a floating presser-member interposed between said feed-roll and said strip- 160 severing means and adapted to press the strip against said top-wall.

7. In a machine of the character set forth: 165 a frame comprising a casting having a top-wall provided with a slot and having an inclined wall meeting said top-wall back of said

slot; a shaft supported above the rear portion of said top-wall; a strip-feeding wheel journaled in said frame and extending into said slot; a strip-guiding member mounted
 5 on said shaft and having a rear end-portion extending beneath the shaft and turned upwardly in the rear of the shaft, said member carrying an idle feed-roll co-acting with said strip-feeding wheel; and a spring engaging
 10 said member and forcing said idle roll towards said feed-wheel.

8. In a machine of the character set forth: a frame comprising a casting having a top-wall provided with a slot and having an inclined wall meeting said top-wall back of said slot; a shaft supported above the rear portion of said top-wall; a strip-feeding wheel journaled in said frame and extending into said slot; a strip-guiding member mounted on
 15 said shaft and having a rear end-portion extending beneath the shaft and turned upwardly in the rear of the shaft, said member carrying an idle feed-roll co-acting with said strip-feeding wheel; and a spring engaging
 20 said member and forcing said idle roll towards said feed-wheel, said member being equipped with a stop for limiting the upward rearward swinging movement.

9. In a machine of the character set forth: a frame equipped with a top serving a guide for a strip, said top being provided with a slot; a strip-feeding wheel extending into said slot; means for intermittently turning said wheel to feed the strip; a spring-pressed
 25 idle roll co-acting with said feed-wheel; a die-plate mounted on said frame in front of said top-wall and provided with a slot; a depressible cutter adapted to enter said last-named slot; and a floating presser-plate interposed
 30 between said cutter and said idle feed-roll.

10. In a machine of the character set forth: a frame provided with a horizontal wall adapted to support a strip as it is fed from the machine; means for intermittently feeding
 35 a strip across said wall; a plate in front of said wall provided with a slot; a horizontal blade adjustably mounted on said plate and projecting over said slot; and a depressible cutter-member equipped with a piercing
 40 blade adapted to work through said slot.

11. In a machine of the character set forth: a frame provided with a horizontal wall adapted to support a strip as it is fed from the machine; means for intermittently feeding
 45 a strip across said wall; a plate in front of said wall provided with a slot; a horizontal blade adjustably mounted on said plate and projecting over said slot; and a depressible cutter-member equipped with a
 50 piercing blade adapted to work through said slot, said piercing blade being provided with a central apex portion and inclined edges extending from the apex portion.

12. In a machine of the character set forth, the combination of a frame-member having

a top-wall cut away at its front end-portion, a guide-plate mounted in the recess thereby afforded and provided with a piercing-slot, a stationary shear-blade supported on said die-plate and having a shearing edge over-
 70 lying said slot, a reciprocable piercing shear-blade co-acting with said stationary shear-blade and working through said slot, strip-feeding means disposed back of said die-plate and adapted to feed a strip forwardly
 75 over said top-wall and between said blades, and a floating presser-plate interposed between the strip-feeding means and said slot.

13. In a machine of the character set forth, a frame comprising a cast-metal member
 80 having integral side walls, a top-wall, and an inclined web interposed between said side walls and forming a junction with said top-wall, said frame having its rear portion provided with a chamber for a roll of strip material, strip-feeding mechanism including a
 85 strip-feeding wheel journaled in said frame in front of said inclined web and a co-acting idle feed-roll disposed above said wheel, said top-wall being provided with a slot into
 90 which said wheel projects, cutting mechanism disposed in front of said feed-wheel, and a presser device mounted on said top-wall between said cutting mechanism and feed mechanism.

14. In a machine of the character set forth, a casing-like frame, a shaft pivotally mounted therein, a spring serving to actuate said shaft in one direction, means for actuating
 95 said shaft in the other direction, a feed-wheel journaled on said shaft, a ratchet device between said feed-wheel and shaft, a cutter device and a leaf-spring securely mounted on said shaft and adapted to actuate the movable element of said cutter device.

15. In a machine of the character set forth; a frame equipped with a top serving as a guide for a strip, said top being provided with a longitudinal slot; a strip feeding-wheel extending into said slot; means for
 100 intermittently turning said wheel to feed the strip; a spring-pressed idle roll co-acting with said feed-wheel; a stationary shearing edge in front of said idle roll; a depressible cutter co-acting with said shearing edge; a
 105 presser-device disposed between said cutter and said idle roll; and means for actuating said cutter actuated through the medium of the means for turning said strip-feeding wheel.

16. In a machine of the character set forth: the combination of a frame member having a top wall provided with a piercing-slot; a reciprocable piercing shear-blade working
 110 through said piercing-slot; means for advancing a strip over said top wall to said severing means; and a floating presser-plate interposed between the strip-feeding means and said piercing-slot.

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