

Sept. 9, 1930.

J. D. MOHR

1,775,404

STAMP AFFIXING MACHINE

Filed May 29, 1928

3 Sheets-Sheet 1

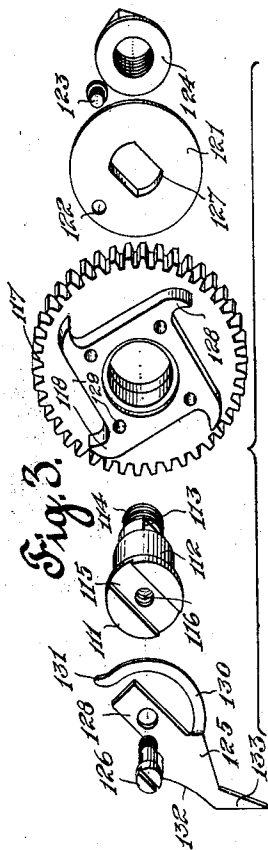


Fig. 2.

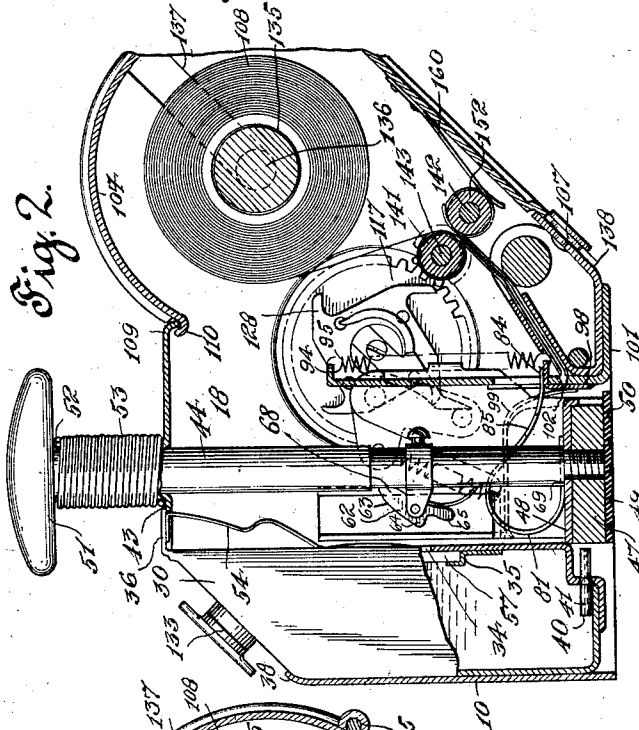
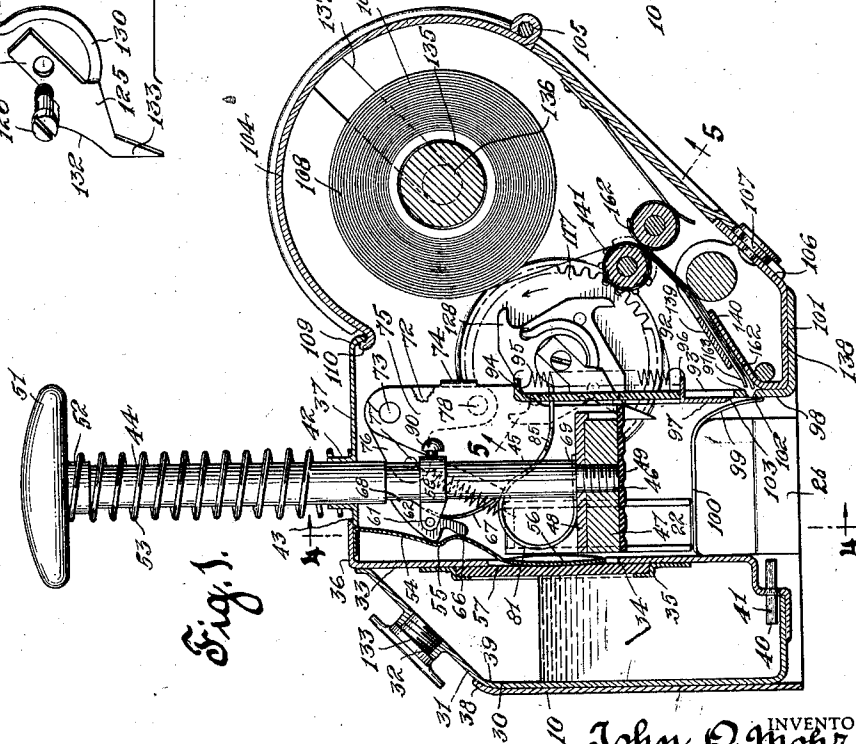


Fig. 1.



John D. Mohr
BY
Frank C. Fischer
ATTORNEY

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J. D. MOHR

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Fig. 5.

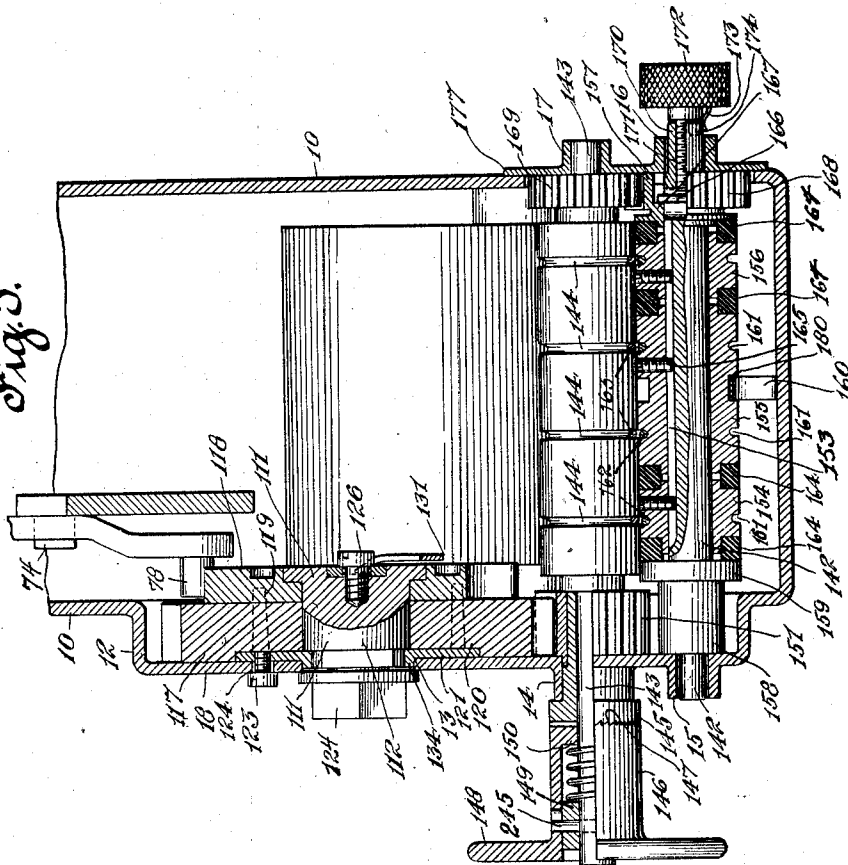
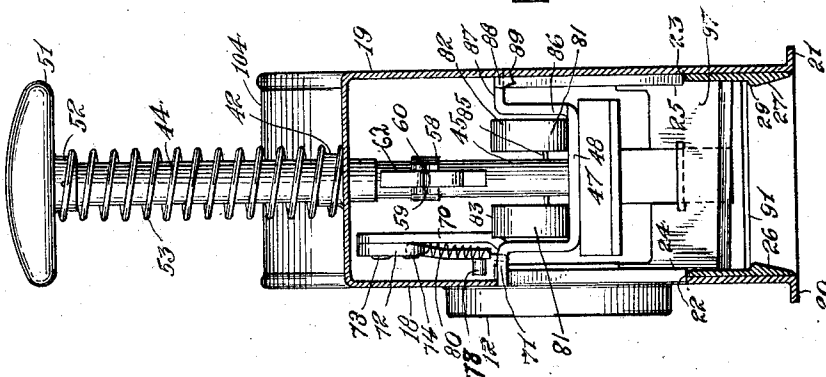


Fig. 4.



INVENTOR
John D. Mohr
BY
Frank C. Fischer
ATTORNEY

Sept. 9, 1930.

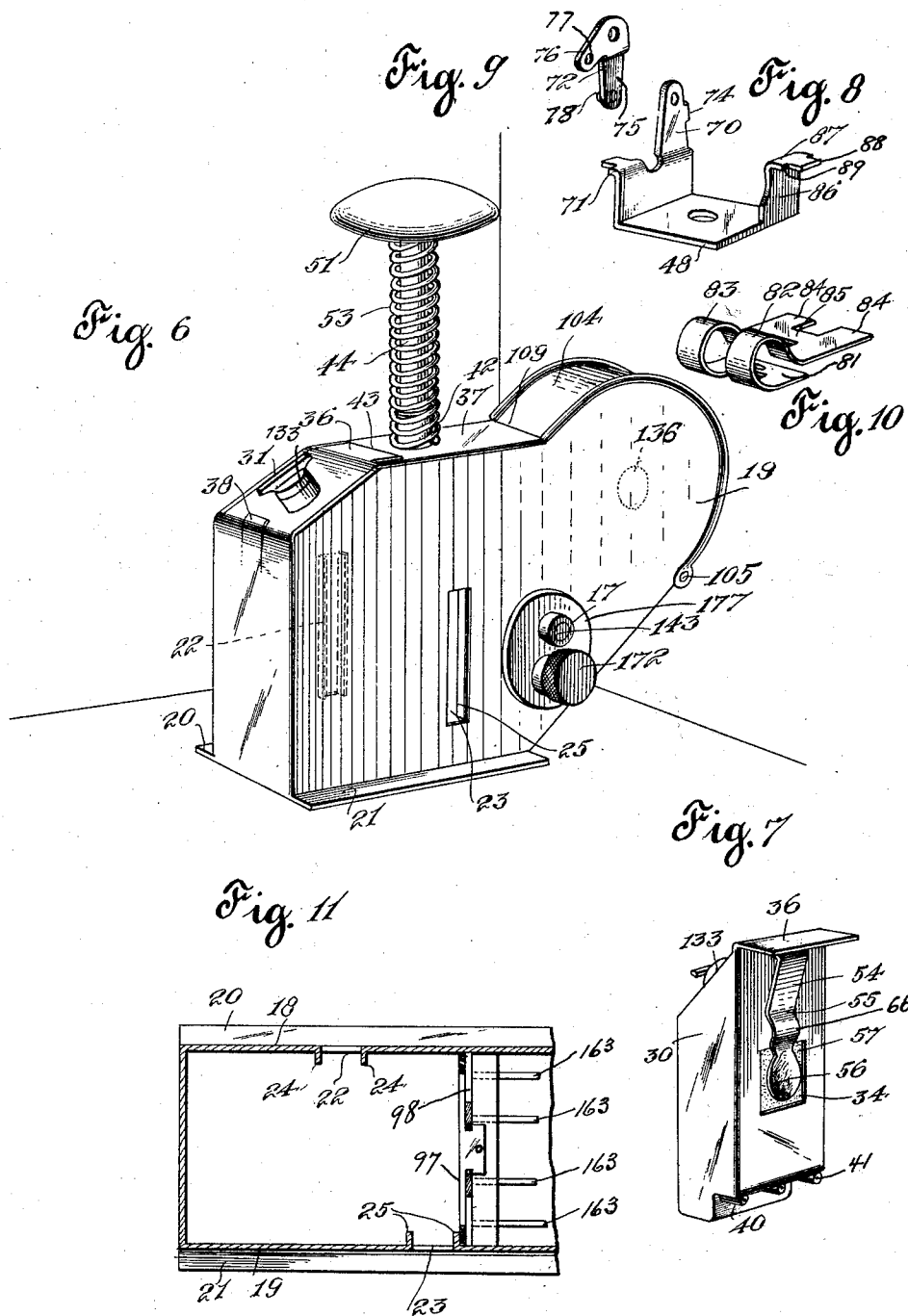
J. D. MOHR

1,775,404

STAMP AFFIXING MACHINE

Filed May 29, 1928

3 Sheets-Sheet 3



INVENTOR
John D. Mohr
BY
Fred C. Lischer
ATTORNEY

UNITED STATES PATENT OFFICE

JOHN D. MOHR, OF NEWARK, NEW JERSEY

STAMP-AFFIXING MACHINE

Application filed May 29, 1928. Serial No. 281,432.

My invention relates to a stamp affixing machine and more particularly to that type of machine utilizing a roll of stamps with lined perforations for shearing the stamps and affixing the latter to an envelope surface or the like.

Broadly speaking, one object of the invention is in the provision of novel means for shearing the stamps in synchronism with the feed supply mechanism in the line of their perforations. Another object of my invention is to provide a novel feed mechanism for supplying stamps to a contracted discharge opening. Another object, is in the provision of a novel plunger-actuating means for controlling the stamp feeding and severing means. Another object is to provide a novel liquid casing having a yieldable element actuated by a plunger for dispensing the liquid and moistening the affixing surface prior to stamping.

Another object and a further advantage of my invention is in the provision of a novel feed recessed gear cooperatively associated with the plunger mechanism for actuating the supply and feed rolls and dispensing the stamps in the line of their perforations in synchronism with the cutting action of the knife.

Another aspect of my invention is in the provision of novel stamp feed rolls associated with inclined and spaced juxtaposed pairs of wires to preclude buckling of the stamps in their travel to the discharge opening to cutting off position.

Specifically, another object of my invention is the utilization of a feed roll having adjustable means for regulating the stamp feed circumferential surface of the roll.

More particularly, another object of my invention is to provide a novel liquid casing having nozzles suitably disposed therein of minute diameter, liquid sealed by capillarity, by the action of the liquid.

Another object of my invention is in the provision of a novel plunger provided with a yieldable spring having a pair of fingers controlling the action of the stamp severing knife. Another object of the invention is in the provision of a casing having vertically

disposed slots, out of register, guiding the plunger and ratchet gear actuating means.

A further object of my invention is in the provision of a novel cam having a ratchet actuating pin deflecting guide, associated with a cam actuating surface.

Another object of the invention is to provide an audible signal device on the cam cooperatively associated with notches in the feed actuating ratchet. Another aspect and a further advantage thereof, is in the provision of an adjustable synchronizing means operatively associated with a recessed gear for either advancing or retarding the stamp feeding means.

A further object of the invention is to provide a novel stamp affixing machine comprising few and novel parts which will work with rapidity, accuracy, ease and which may be manufactured at relatively small expense.

It is to be understood the new stamp affixing machine herein disclosed is merely suggestive of a type of stamp affixing machine that may be employed in carrying into operation the novel construction; it being understood, any other suitable stamp affixing machine of this construction and arrangement of structural elements may be employed within the spirit and scope of the invention.

The invention is exemplified in the combination and arrangement of parts shown in the accompanying drawings and described in the following specification and is particularly pointed out in the appended claims.

Referring to the drawings:

Figure 1 is a front sectional elevation of the stamp affixing machine with the plunger in raised position.

Figure 2 is a sectional elevation of the stamp affixing machine with the plunger depressed.

Figure 3 is an exploded view of the indexing, spacing, locking and timing mechanism.

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Figure 5 is a sectional view taken on the line 5—5 of Figure 1, in the direction of the arrows.

Figure 6 is a perspective view of the cas-

ing illustrating salient structural features of the machine.

Figure 7 is a perspective view of the liquid container.

5 Figure 8 is a perspective view of the guide bracket plate.

Figure 9 is a perspective view of the bell crank lever.

10 Figure 10 is a perspective view of the spring that actuates the knife.

Figure 11 is a fragmentary horizontal sectional view of the casing.

In the drawings 10 designates an open casing having a raised boss 12 including an opening 13 and merging into a clutch bearing flange 14. The casing 10 is also provided with a lower bearing 15 and outside bearing plate 177 embodying upper and lower bearings 17 and 16 respectively.

20 The casing 10 embodies side walls 18 and 19 having oppositely disposed lower surface flanges 20 and 21. Extending vertically in said walls 18 and 19 is a pair of slots 22 and 23 respectively out of registration.

25 Upon the vertical edges of said slots is a pair of extending flanges 24 and 25 projecting inwardly into the hollow interior of the casing for a purpose which will be hereinafter disclosed. Disposed adjacent the lower edges of the vertical slots 22 and 23, and secured to the opposite walls 18 and 19, are the stamp guide plates 26 and 27, each of said plates being provided with a stamp receiving shoulder 29 preferably in the same horizontal plane.

35 Associated with one end of the casing 10 is a water reservoir 30 comprising a substantially closed body embodying an inclined wall 31 having a closure 32 adapted to receive a threaded cap 133. The reservoir 30 is made in two parts, for instance, the rear wall 33 is secured to the inclined and front wall 31, and the bottom of the reservoir casing is overlapped and secured together in any well known manner. The rear wall 33 is provided with an opening 34, and secured adjacent thereto on the inside of the rear wall 33 is the framing element 35 adapted to receive a yieldable flat element 57 which may be of rubber or the like to form a resilient closed wall which bears snugly against the sides of opening 34, being air and liquid tight.

55 The reservoir 30 is suspended within the open casing 10 and is supported by the outwardly extending flange 36 suitably mounted on a plate 37 and by the spring reflexed portion 38 snugly fitting the inclined shoulder 39 of the reservoir casing.

60 Adjacent the bottom of the reservoir casing 30 is a plurality of horizontal extending tubes 40 (one being illustrated in Figures 1, 2, and 7) although in actual practice one or more may be employed. These tubes project beyond the reservoir wall, and have a

longitudinal bore 41 of minute diameter, forming a water seal for the liquid within the reservoir casing to preclude the discharge of any liquid through the tubes except through pressure exerted on the liquid or upon the air above the head of the liquid. 70

The plate 37 is suitably and detachably secured to the upper edges of walls 18 and 19 in any well known manner. The plate 37 is provided with a collar 42 having the complementary bearing flange 43 which provides a supporting means for the outwardly extending flange 36 of the rear wall 33 of the reservoir casing 30. Extending vertically of the casing 10 and slidably associated within the upper bearing plate collar 42 is the plunger 44 having a stem 45 and embodying a contracted threaded terminal 46 adapted to receive the stud plate 47 which carries the guide bracket plate 48. Suitably affixed to the stud plate 47 is a flat resilient mat 49 having a plurality of corrugations 50 on its lower face to obviate a vacuum in supplying air in the corrugated spaces to prevent suction between the lower mat face and the stamp to be affixed. 75 80 85 90

The upper portion of the plunger 44 is provided with a knob 51 having a boss 52 at the upper end thereof. Interposed between the upper bearing collar 42 and the boss 52 of the knob is a resilient coiled spring 53 which is adapted to hold normally the plunger in elevated position. Depending from the outwardly extending flange 36 (see Figure 7) is the irregular shaped leaf spring 54 having a recessed portion 55, an abutment raised portion 66 and a cup shaped terminal 56 adapted to loosely engage in normal position the flexible yieldable flat element 57. 100 105

The stem 45 is provided with a saddle 58 having a pair of freely extending arms 59 and 60 between which is journaled the fulcrum pin 61 and on the latter is rotatably secured the trigger 62. The saddle 58 is adjustably mounted on the stem 45 of the plunger by means of the set screw 90. 110

The trigger comprises a body having an upper bearing face 63 and a pair of lower engaging cam surfaces 64 and 65 for engaging with the recessed portion 55 and the raised portion 66 on the leaf spring 54. A leaf tension spring 67 is secured to the under face of the trigger 62 at one end and the other end bears loosely against the surface of the stem 45. In the raised position of the plunger, the cam portions 64 and 65 of the trigger bear loosely against the recessed portion 55 and the raised portion 66 of the leaf spring 54. On the downward movement of the plunger 44, it will be apparent that the trigger surface 68 abuts the surface of stem 45 and forces the cam face 64 of the trigger against the raised face 66 of the leaf spring 115 120 125 130

54, and the cam face 65 against the raised portion 66.

Accordingly, the lower terminal 56 of the leaf spring 54 is pressed against the yieldable element 57 and distends the latter causing added pressure on the head of liquid within the reservoir casing, and consequently a discharge of liquid will be ejected through the tubes 40 between the stamp guide plates 26 and 27 onto an envelope or any other stamp affixing surface prior to attaching the stamp.

The guide bracket plate 48 is secured to the stem 45 against a shoulder 69 and embodies a flat horizontal lower plate indicated by reference character 48 and a standard 70 (see Figures 4 and 8) having the lateral lug 71 provided with an extension embodying shoulders (see Figure 8) adapted to abut the flanges 24 of the opening 22 in the wall 18. The flanges 24 adjacent the opening of slot 22 form a guiding means for the contracted extension on the lateral lug 71 of the standard. The standard 70 is provided with a bell crank lever 72 (see Figure 9) which is fulcrumed on the pin 73 secured to the standard 70 which embodies an off-set stop member 74. The bell crank lever 72 comprises a long arm 75 and a short arm 76 and the latter is provided with a perforation 77 and the longer arm is provided, at its terminal, with an operating pin 78. The longer arm of the bell crank lever embodies the flat face also indicated by reference character 72, bearing against the outer face of standard 70 and the remaining portion of the long arm is off-set and extends away from the engaging face of the standard 70 as clearly illustrated in Figure 4.

The operating pin 78 extends laterally from the lower off-set portion of the long arm of the bell crank lever. The shoulder 74 on the standard 70 forms an abutment for the off-set part of the long arm 75. A coiled spring 80 is passed through the perforation 77 of the short arm 76 and is secured thereto while the other end of the coiled spring 80 is secured to the off-set guiding lug 71 in any suitable manner. The coil spring 80 normally maintains the off-set long arm of the bell crank lever in engagement with the shoulder 74 of the standard 70.

Suitably mounted on the guide bracket plate 48 is a spring 81 (Figure 10), rigidly set about the stem 45, embodying a pair of end loop shaped spaced ears 82 and 83 and the latter merge into a pair of interconnected spaced cutter operating fingers 84. The loops are interconnected by the integral brace 85 (see Figure 10). It is to be understood that the spring 81 is a single integral member which is shaped to comprise the loops 82 and 83, the interconnected brace 85, and the spaced cutter operating fingers 84. The fingers actuate the cutter 97 and straddle the standard 92 (see Figure 1).

Integrally associated with said guide bracket plate 48 is a projecting arm 86 having the lateral extension 87 embodying a contracted terminal portion 88 provided with suitable shoulders 89 which bear against the sides of the frame flanges 25 contiguous to the vertically disposed slot 23 in the casing wall 19.

It will be appreciated that upon the downward stroke of the plunger the extensions 71 and 87 of the guide bracket plate 48 are guided in their path of travel by the pairs of flanges 24 and 25 respectively. Disposed between the open sides of the casing 18 and 19 and fixedly secured therebetween is the cutter standard bearing frame 101 embodying the contracted stamp discharge slot 91 and the integral elevated cutter support 92 which is suitably provided with an opening 93 extending longitudinally thereof.

The upper portion of the standard is provided with a lug 94 having a perforation in which is secured one end of the coiled spring 95 while the other end of the spring is fixed to the lateral extension 96 of the cutter 97. The flange 96 registers with and is slidably guided by the lower opening 93 of the standard support 92.

The cutter comprises the flat plate 97 having its terminal portions guided by one flange 25 (see Figure 11) and snugly bears against the standard support 98 (see Figure 2) by means of a pair of tension springs 99 suitably fixed as at 100 on the upper edges of the stamp guide plates 26 and 27, respectively (see Figure 1). It will be seen that the tension springs 99 have their free ends 102 bearing against the cutter in the downward progression of the latter past the contracted stamp discharge opening 91 and this provides a snug sliding operative engagement of the cutter 97 and the standard walls 98. Of course, the cutter 97 is provided with a sharp, sloping, bevelled edge 103. Normally spring 95 maintains the cutter 97 in elevated position above the opening 91.

The open casing 10 is provided with a detachable cover comprising the arcuate closure 104 which is suitably hinged at 105 and is locked to the chute mount 106 at 107 by any well known means. The locking means may comprise the conventional lock and key elements to preclude unauthorized use of the stamps on the supply roll 108 mounted within the casing. The chute mount 106 is secured between the walls 18 and 19 and against the frame standard support 101. The free portion of the arcuate cover is detachably secured to the upper bearing plate 37 by a spring lock comprising a pair of interconnected elements 109 and 110 one of which extends downwardly from the upper bearing plate and the other is reflexed upwardly about the free end of the arcuate closure 104,

and coacts with the depending extending portion 109.

Preferably mounted within the opening 13 of the casing 10, (see Figure 5), is the indexing, timing and spacing mechanism, and the same comprises (see Figure 3) a stud screw 111 comprising a circular bearing face 112 and a rectangular contracted shoulder 113 having a terminal threaded portion 114. The upper face of the stud screw is provided with a recess 115 and a central threaded opening 116. A feed gear 117 embodying the ratchet 118 which is suitably fixed thereto by pins 119 (see Figure 5) is mounted upon the stud screw 111. The gear 117 is provided with a circular recess 120 in which is mounted the metallic washer 121 rotatable in the recess 120.

The washer is provided with an aperture 122 in which is detachably secured the lock synchronizing screw 123 and the latter registers with and operates within an arcuate slot 124', and securely locks the washer to the casing boss 12. Adjustably secured within the recess 115 on the stud screw is the timing, indexing, locking and spacing cam 125, by means of the set screw 126.

The lock metal washer 121 is provided with an elongated central opening 127 which registers and coacts with the stud shoulder 113. The lock nut 124 is threaded on to the terminal portion 114 and holds the washer 121 against the edges of opening 13 and also secures the washer within the recess 120 of the gear 117. Mounted within the recess 115 of the stud screw 111 is the timing, indexing, locking and spacing cam 125 by the extension 128 which is locked in the recess 115 by the set screw 126.

In other words, the stud screw 111 is mounted within the opening 13 and carries the metal synchronizing washer 121 fitting within the recess 120 of the gear 117. The outer end of the stud screw 111 adjustably retains the lock nut 124 which firmly secures in non-rotatable position in the opening 13 the stud screw 111 and the set screw 123 locks the washer to the side of casing 12. It will be seen that the gear and the ratchet are rotatably secured on the central bearing of the stud screw and the cam 125 is fixedly secured within the top face 115 of the stud screw. To change the position of the cam 125 all that is necessary, is to release the synchronizing lock screw 123 and lock nut 124 from the side wall 12 and rotate the washer 121 either one way or another within the limits of the arcuate slot 124' and securing the lock screw 123 and lock nut 124 against the wall 12 when proper synchronizing adjustment is obtained. That is, the lock screw 123 is utilized to obtain the proper timing relation of the cutter 97 with the feeding mechanism for severing the stamps along the lines of their perforations of the stamp roll.

The ratchet 118 is provided with a plurality of curved hooks 128 and a plurality of diagonally disposed notches 129 each notch being so positioned as to be contiguous to a hook.

The timing, indexing and spacing cam embodies the irregular shaped plate 125 having a perforated extension 128. The cam embodies also an arcuate off-set integral indexing finger 130 having an index spring prong 131 which coacts in springing engagement, with either of the notches 129 in the ratchet causing a click which constitutes an audible signal that the stamp feed is complete before knife or cutter 97 is ready to cut.

The cam 125 embodies an arcuate cam face 132 merging into a tapering deflecting nose 133. The washer 121 is provided with a shoulder 134 (Figure 5) bearing against the sides of the opening 13 and adjustably secured therein (see Figure 5). When the audible signal is heard the pin 78 is "knocked off" the ratchet hook 128 by cam surface 132 and follows edge of deflecting guide 133.

The stamp supply roll 108 is preferably mounted on a metallic tube 135 and is rotatably secured on the shaft 136 extending between the casing walls 18 and 19 and is slidably locked therein in the inclined recesses 137. The stamps are preferably mounted on the tube 135 to reduce the binding action with the surface of the shaft 136 and to aid with the least possible friction, the stamp dispensing discharge from the stamp roll.

For guiding a continuous supply discharge of stamps severed at their proper parallel disposed perforations, there is provided a novel chute mounted in the cutting standard bearing frame 101 and the chute mounting comprises a casing 138 secured in the cutting standard bearing frame 101 which embodies the diagonally disposed inclined guiding plates 139 and 140.

Cooperating with the feed gear 117 are the upper and lower stamp feed guiding rolls 141 and 152, respectively. The upper feed roll is mounted on a shaft 143 extending transversely the width of the casing and the roll 141 is provided with a plurality of spaced circumferential grooves 144, also shaft 143 is rotatably secured in the outside bearing plate 177 and the bearing 14 of the casing 10. The shaft 143 is further provided with complementary interacting clutch elements 145 and 146 provided with cooperating serrations or teeth 147. The clutch element 146 is provided with a manual manipulator 148 and an abutment 149 through which the pin 245 fastened to shaft 143 is fixed and adjacent the serrations of the clutch element 146 is a coiled spring bearing against the collar abutment 149 surrounding the shaft 143 and also bears against the flange 150 normally locking the clutch element 146 on the complement clutch collar 145 which is loosely mounted

on the shaft 143 and rotatably within the bearing 14. A pinion 151 is fixedly carried by the complementary collar 145 and engages with the feed gear 117 of the timing, spacing and indexing mechanism.

Secured to the lower shaft 142 which is suitably journaled in aligned bearings 15 and 16 on the casing and provided with the necessary play in the lower stamp guiding roll 152 (Figure 2) embodying the longitudinal groove 153 and a plurality of loosely disposed and spaced collars 154, 155, 156 and 157.

The shaft 142 is provided adjacent the bearing 15 with an enlarged boss 158 acting as an abutment against the shoulder of bearing 15 and cooperating with a circumferential flange 159 which forms an abutment for purposes which will be hereinafter set forth. The intermediate collar 155 is provided with a recess adapted to receive a leaf spring 160 preferably secured to the inclined face of the arcuate detachable closure 104.

The leaf spring 160 normally rests in the recess 180 of the intermediate collar 155 and keeps the lower roll in proper operating position. It will be noted that the collars 154, 155 and 156 are provided with circumferential grooves 161 adapted to receive lower chute constituting wires 162 (see Figure 1). The wires 162 extend in the direction of inclined lower chute plate 140 and terminate with their free ends turned slightly upwardly for keeping the stamp flat, when discharged from the opening 91. The upper feed roll is also provided with supplemental stamp guiding means in the form of spaced wires 163 extending at an incline in spaced juxtaposed relation to the lower set of wires 162 and also have their free ends terminate with their free ends turned upwardly adjacent the discharge opening 91.

The upper and lower series of spaced wires are suitably secured in spaced relationship to the inclined plates 139 and 140 respectively. The upper ends of the series of wires 163 are turned over the upper roll 141 and reflexed within the grooves 144. The upper terminals of the lower series of wires 162 are reflexed within the grooves 161 on the spaced collars.

It will be seen that the gap provided between the upper and lower series of wires forms a downwardly sloping passageway having the proper spacing to eliminate buckling of the stamp strip in its travel through the chute to opening 91 and after discharge the stamp is in a flat horizontal plane.

To compensate for the irregularities and inequalities in the width of the stamp due to variations in temperature, humidity and other natural incidents, proper adjustment may be had whereby the stamps of irregular width register with their perforated line always in shearing position under the cutter. By varying the acting feed circumference on the lower roll, for example, where there is

a variation from the standard width of the stamp through the reduction or increase in the width of the stamp, the actual cutting adjustment would have to be synchronized in such way with the feeding action of the stamp feed rolls to allow for this reduction or increase, and this is accomplished by providing yieldable and resilient washers 164 in annulus formation disposed between the collar 154 and the circumferential flange 159 between the adjacent collars 154 and 155; between collars 155 and 156 and between the latter and the terminal collar 157.

The collars 154, 155, and 156 are slidably secured to the shaft 142 by means of the set screws 165 having their lower ends fitting within the longitudinally disposed shaft slot 153.

The terminal collar 157 is provided with an internal shoulder 167 adapted to coact with the pin 166 and is provided on its periphery with a suitably disposed gear 168 adapted to mesh with the gear 169 secured to the upper shaft 143.

Normally the circumference of the lower roll collars and the yieldable elements are slightly less than width of a stamp and the outer surfaces of the yieldable elements are flush with circumferential surfaces of the collars.

The upper and lower feed rolls are designed so that a single revolution of these rolls causes the feed of the stamp strip substantially equivalent to the width of a stamp. Also, a certain part of a revolution of the feed ratchet gear, actuates the feed rolls one revolution.

Extending longitudinally of the bearing 16 is the interiorly threaded end 170 of shaft 142 cooperating with the threaded stem 171 having a manual manipulator 172 embodying the depending spring locking element 173 adapted to coact with the spring corrugations 174 on the exterior surface of the end of shaft 142.

It will be appreciated that by turning the manipulator 172 causing the threaded stem 171 to travel inwardly and engage the pin 166 which will strike and abut the internal shoulder 167, the pressure transmitted by the terminal collar 157 will cause the yieldable annular members 164 "to give" thereby increasing their circumferential length, and accordingly compensate for the inequalities in the width of the stamp.

That is, where there is a width in the stamp greater than normal, it is necessary to increase the diameter of the yieldable members 164 for proper synchronization with the cutter 97 and similarly where the stamp has decreased in length because of temperature and humidity effects or other causes the diameter of the yieldable members 164 accordingly would be decreased and this is accomplished by releasing the pressure between the adjacent

collars in moving the threaded stem 171 away from the pin 166. The inherent resilience of the yieldable members 164 will tend to spread the collars apart when the stem 171 moves away from the pin 166.

The stamps from the supply roll 108 are threaded between the upper and lower rolls 141 and 152 and between the unbuckling guide wires 162 and 163 to the discharge mouth 91 and fed on to the stamp guide plates 26 and 27 which support the stamp in a horizontal plane on the shoulders 29.

Where it is required to affix a stamp to an envelope surface, the machine is placed bodily on the envelope so that the stamp affixing area is substantially between the lower bearing flanges 20 and 21 between the walls 18 and 19 of the casing 10.

In the operation of the device, four functions take place on the downward stroke of the plunger 44, to wit:—first, the moistening; second, the feeding; third, the severing or cutting; fourth, stamping. That is to say, when the plunger is depressed, the first operation occurs when the trigger surface 68 abuts the stem 45, trigger 62 actuating the leaf spring 54 causing the yieldable diaphragm 57 to be distended thereby increasing the pressure within the liquid container 30 dispensing jets of liquid through the nozzles 40 onto the affixing surface of the envelope (not shown) which is placed between the spaced stamp guide plates 26 and 27. As the plunger moves downwardly, pin 78 of the bell crank lever 72, comes in contact with one of the aligned hooks 128 of the ratchet 118 and causes the ratchet to rotate the gear 117.

Because of the engagement of the pin 78 with one of the hooks 128, locking point 131 of the spring finger 130 is released from one of the notches in the ratchet 118. The release of the spring finger from the notch allows the gear to rotate until the pin arrives at the "knocked off" position. That is, the pin in its downward travel against the ratchet is also in riding engagement with the cam surface 132 of the cam 125 and it is at the merger of the deflecting plate guide 133 with the cam surface 132 that this "knocked off" position takes place.

When the pin has reached the "knocked off" position, it will be seen that the ratchet has caused the gear to move one part of a revolution and consequently the spring finger 130 is moved into a new notch locking the ratchet. The gear 117 transmits motion to the gear 151 of the loosely mounted clutch collar 145 and accordingly rotating the upper feed roll on shaft 143 one revolution and the latter actuates the lower feeding roll on the shaft 142 one revolution causing the stamps from the supply roll 108 to be led between the unbuckling guide wires 162 and 163 and to the orifice 91 ready to be severed by the downwardly progressing knife or cutter 97

which has been actuated by the spring fingers 84 of spring 81.

In the severing position of the stamps, the feed rolls and the cutter automatically cooperate, that is, the severing takes place along the line of the perforations. A stamp, after being severed, is held on the shoulders 29 of the guide stamp plates 26 and 27 and is maintained in a single plane because of the unbuckling action previously referred to of the guide wires 162 and 163 in the guide chute 139 and 140 and the reflexed terminals of the guide wires adjacent opening 91. In the final part of the plunger stroke, the stamp becomes affixed to the envelope surface by the action of the plate or mat 49 on the press plate 47 acting upon a stamp as it is held between the shoulders 29. Between the "knocked off" position on the cam 125 and the vanishing point on the deflecting guide plate 133, the cutting or severance of the stamp and the affixing occurs. Following the affixing of the stamp the plunger moves upwardly and the pin 78 moves along the deflecting plate upwardly and directly over a ratchet hook but in spaced relation therewith, so that upon the next downward stroke of the plunger 44, the pin 78 will engage the aligned and adjacent ratchet hook 128.

Of course, normally the cutter 97 is held in uncutting position by the spring 95 and the normal position of pin 78 is in alignment with one of the hooks of the ratchet by reason of the spring 80.

For controlling the synchronization of the cutter with the feeding means either in advanced or retarded position the adjusting synchronizing screw 123 is loosened so that the washer 121 may be rotated either one way or another within the gear recess and the arcuate casing slot 124.

In practice, it is generally advisable, first to thread the supply stamp roll and strip of stamps between the upper and lower stamp feed rolls; then downwardly through the chute 139 and 140 until the aligned perforations of a pair of stamps are flush with the wall 98 or directly under the cutter and subsequently releasing the clutch by detaching the coupling 146 from the clutch collar 145 thereby disengaging the clutch collar 145 and gear 151 from the shaft 143; and finally rotating the manual manipulator 148 causing the pin 245 to actuate shaft 143, consequently rotating the upper feed roll and the latter actuates the lower feed roll.

When one revolution of the manipulator has been completed the proper stamp width should have been fed into position for severance along the line of perforations. If not, the lower collars are adjusted in such manner as heretofore explained so that the yieldable washers 164 will either be increased or decreased in diameter for proper width discharge of a stamp along the line of perfora-

tions under the severing position of the cutter. By actuating the synchronizing screw 123 the advanced or retarded feed stamp position may be compensated for and adjusted.

crank and operatively associated with said feed gear.

6. In a stamp affixing machine embodying a casing having a plunger suitably disposed therein, means for feeding said stamps to a discharge opening embodying a feed gear, and means controlled by the plunger for actuating said gear, said plunger being provided with a guide bracket plate a bell crank disposed on the guide bracket plate said guide bracket plate being provided with stop limiting means and means for restricting said bell crank against said limiting means.

5 In the synchronized position, the line of perforations, are under the cutter when the latter is flush with the upper edge of the opening, and at this instant pin 78 is at the "knocked off" position.

10 From the foregoing description considered in connection with the accompanying drawings, it is believed that several novel, structural features of my present improvement as well as the advantages thereof in practical operation will be readily appreciated. Because of the simple form of the various elements entering into the disclosed construction the device may be produced at comparatively small manufacturing costs.

20 I have also described and illustrated in the accompanying drawings a structural embodiment of the device which I have found to give highly satisfactory results, and it will be obvious to those skilled in the art after an understanding of my invention, that other changes and modifications may be made without departing from the spirit and scope of my invention, and I aim in the appended claims to cover such changes and modifications as are within the scope of my invention.

I claim:

1. In a stamp affixing machine, in combination with a casing, of a liquid container having a yieldable wall and means for distending said wall for ejecting liquid from the container, said means comprising a spring depending from the container and bearing against one surface of said yieldable wall.

2. In a stamp affixing machine, a casing having suitably disposed slots with inwardly extending flanges, and a plunger guided by said flanges.

3. In a stamp affixing machine, a casing having slots with inwardly disposed flanges, an upper bearing plate carried by the casing, and a plunger slidably secured within said plate and guided by said flanges.

4. In a stamp affixing machine, a casing having slots with inwardly disposed flanges, an upper bearing plate carried by the casing, and a plunger slidably secured within said plate and guided by said flanges, said plunger embodying a guide bracket plate cooperating with a press plate provided with a resilient mat.

5. In a stamp affixing machine embodying a casing having a plunger suitably disposed therein, means for feeding said stamps to a discharge opening embodying a feed gear, and means controlled by the plunger for actuating said gear, said plunger being provided with a guide bracket plate, a bell crank disposed on said guide bracket plate and audible signal means cooperating with said bell

7. In a stamp affixing machine, feed mechanism, stamp feeding rolls actuated thereby, means for actuating said feeding mechanism, said feed mechanism embodying a cam having a tapering deflecting plate.

8. In a stamp affixing machine, embodying feed mechanism, stamp feeding rolls associated therewith, means for actuating said feeding mechanism, audible signal means carried by the feeding mechanism and means carried by the signal means for locking said feeding mechanism.

9. In a stamp affixing machine embodying a feed mechanism, a cutter for severing said stamps, stamp feeding rolls, means for altering the circumference of one of said rolls and audible signal means carried by the feeding mechanism.

10. In combination with a stamp affixing machine, of a feed mechanism, upper and lower stamp feeding rolls, means associated with the mechanism for controlling the adjustment of the feed and audible signal means carried by the feeding mechanism for locking the latter.

11. In combination with a stamp affixing machine, of stamp feed rolls, feed mechanism therefor, a cutter associated therewith, means carried by the said mechanism for synchronizing with the action of the cutter and locking means associated with the feed mechanism to produce an audible signal.

12. In combination with a stamp affixing machine comprising a feed mechanism, upper and lower feed rolls actuated thereby, one of said rolls comprising a plurality of spaced collars associated with resilient elements and means for changing the circumference of said elements.

13. In combination with a stamp feeding and affixing machine consisting of a feed roll embodying a shaft having a longitudinally disposed slot, yieldable elements on said roll and means associated with said feed roll for altering the periphery of said elements.

14. In combination with a stamp affixing machine embodying a feed roll having a shaft with a longitudinally disposed slot, yieldable elements on said roll, collars slidably mounted on said shaft, means guiding said collars on said shaft and means associated with said feed

roll for altering the periphery of said elements.

15. In combination with a stamp affixing machine, stamp feeding and moistening means, stamp severing means associated therewith and means preventing the buckling of said stamps in reaching the severing means, and audible signal means carried by the stamp feeding mechanism for locking the latter.

16. In a perforated stamp affixing machine, stamp feeding and moistening means, stamp severing means associated therewith and means preventing buckling of said stamps in reaching the severing means, audible signal means carried by the stamp feeding mechanism for locking the latter, and means for synchronizing the severing means with the feeding mechanism for cutting the stamps in the line of their perforations.

17. In a stamp affixing machine, a casing a liquid container carried in the casing, a spring depending from the casing in proximity to a wall of the container, a plunger mounted in the casing, and means on the plunger for engaging the spring to cause the latter to bear against the wall of the container.

This specification signed this 25th day of May, 1928.

JOHN D. MOHR.

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