S. T. TRACY & A. M. MOYLAN.

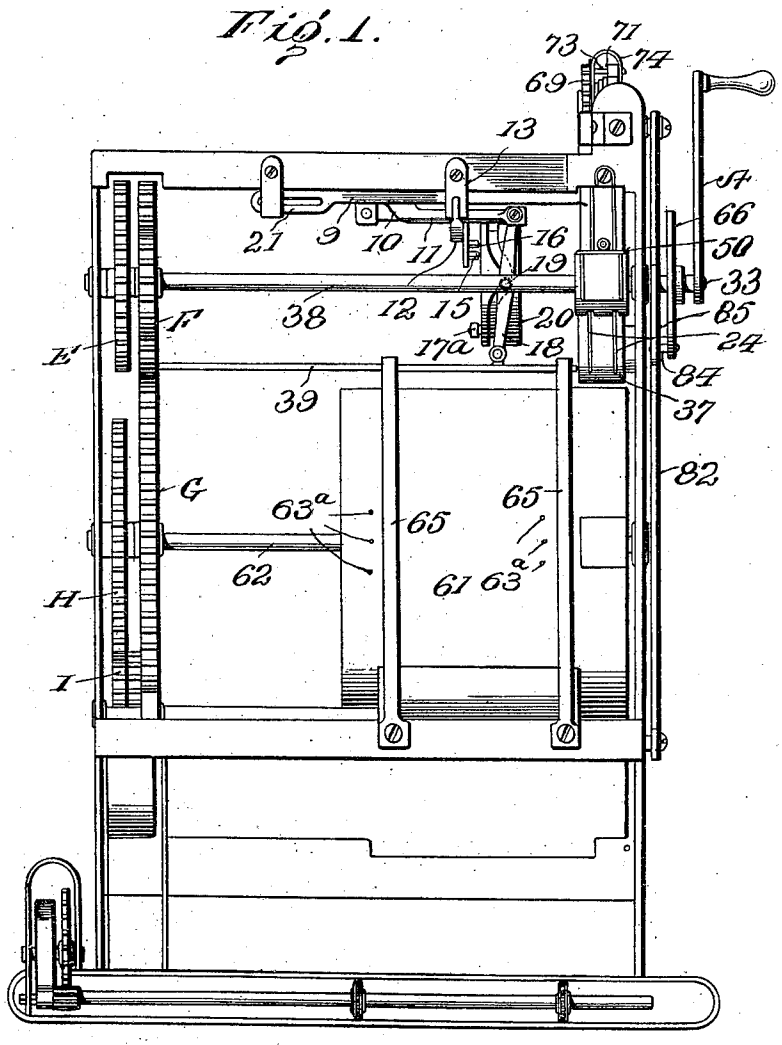
STAMP CUTTING MACHINE.

APPLICATION FILED DEC. 22, 1909.

989,734. Patented Apr. 18, 1911.

6 SHEETS—SHEET 1.

Fig. 1.



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Witnesses

W. [illegible]

Juana M. Fallin,

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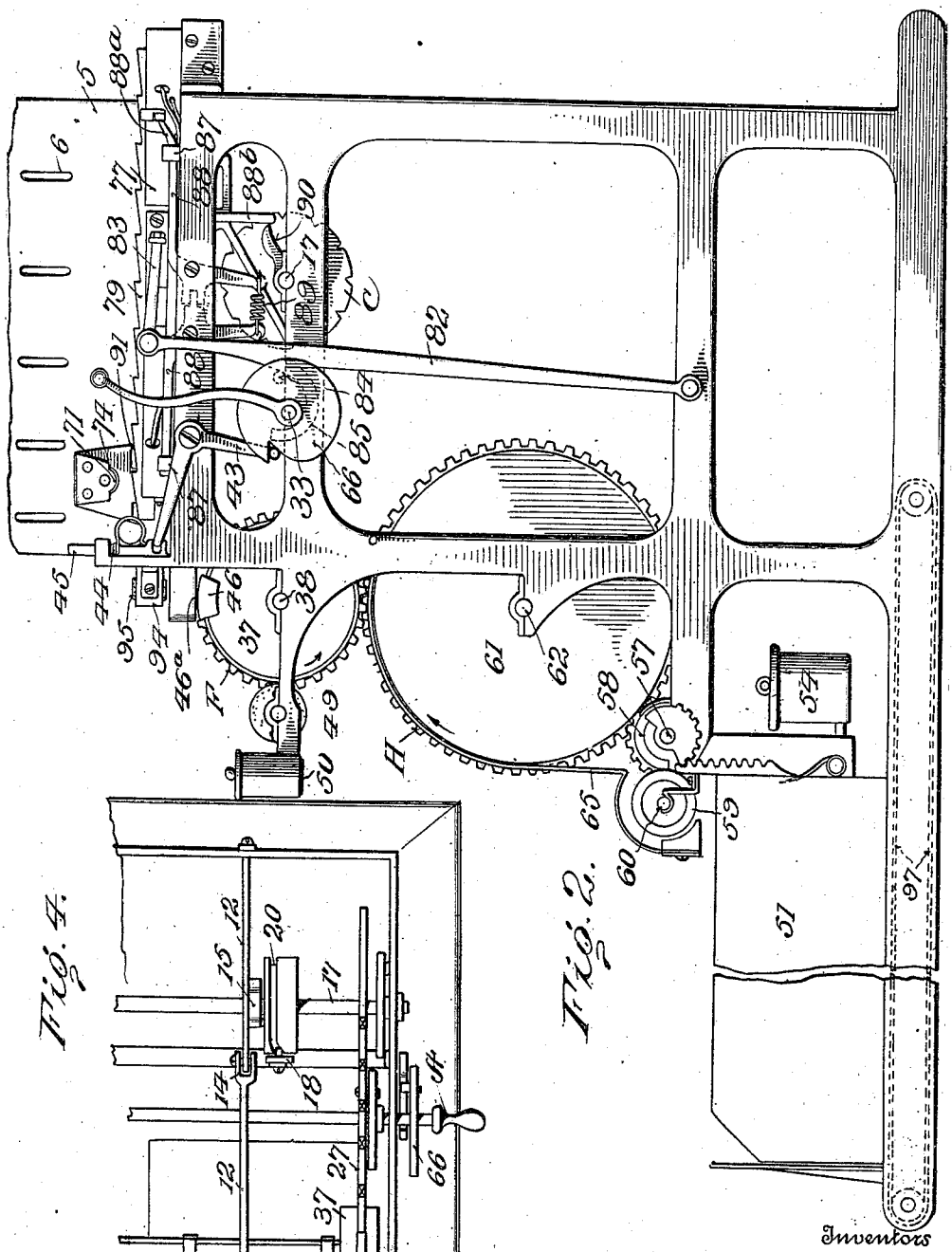


Fig. 2.

Fig. 4.

Witnesses

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6 SHEETS—SHEET 3.

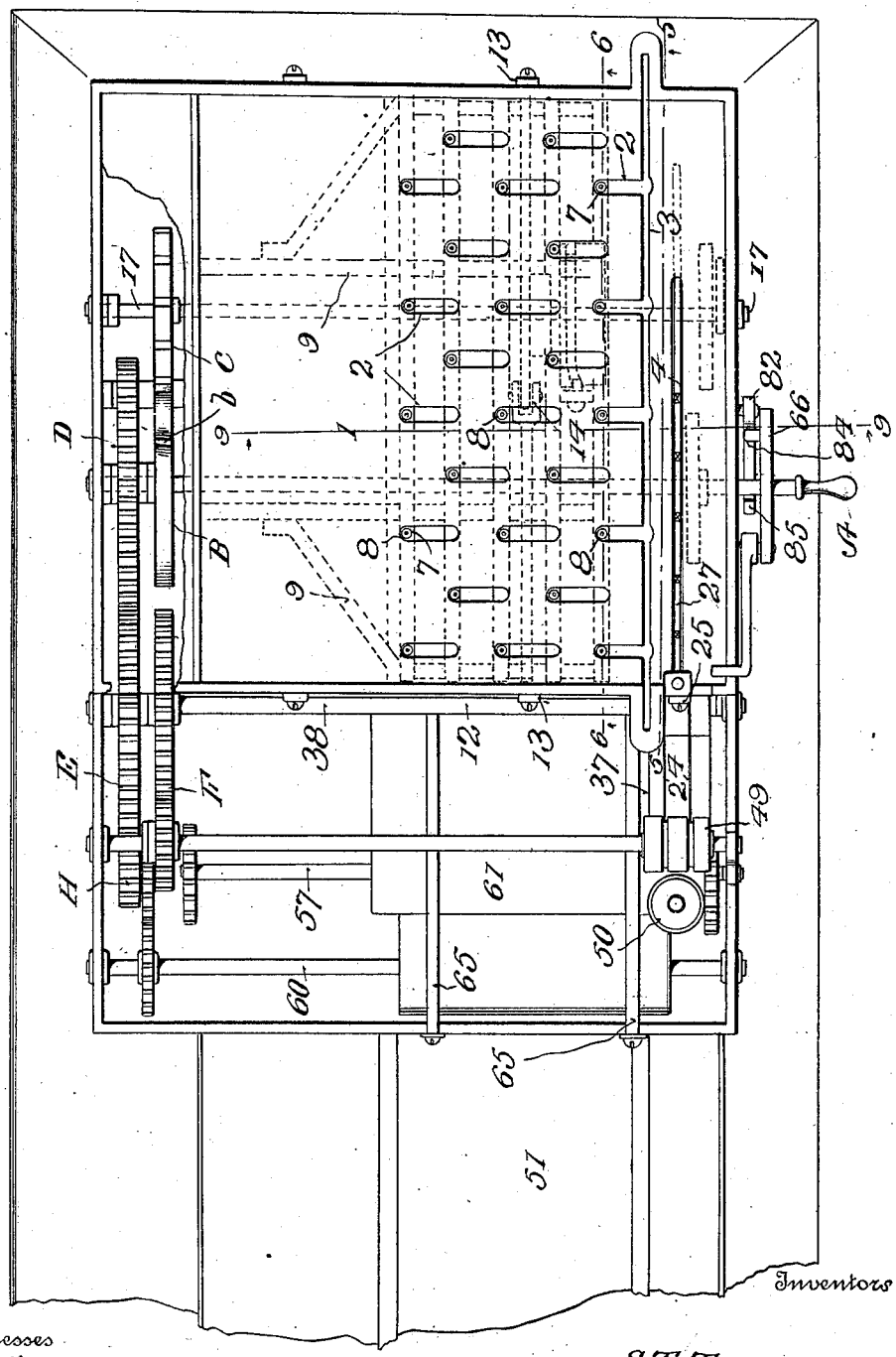


Fig. 3.

Witnesses

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6 SHEETS—SHEET 4.

Fig. 6.

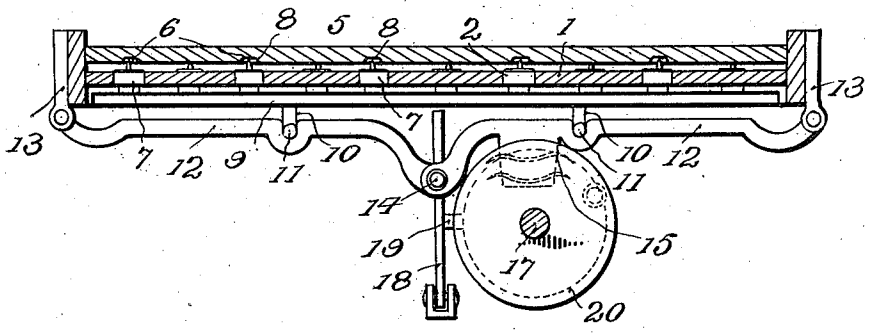
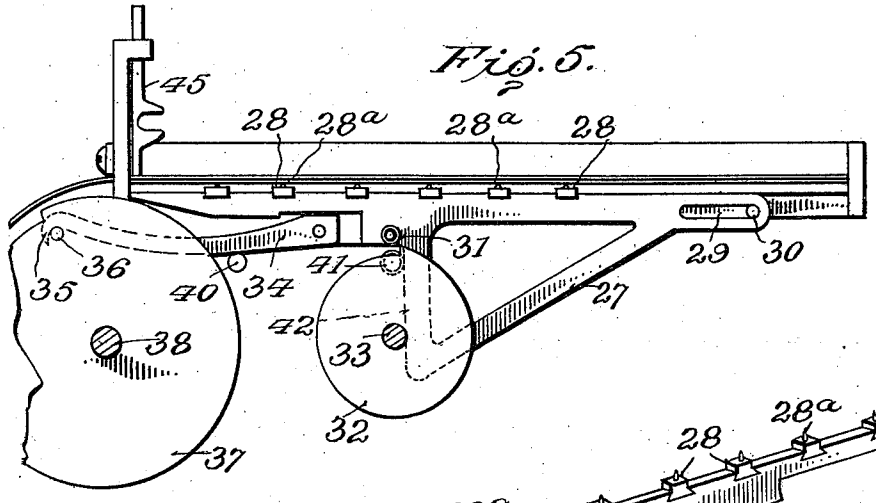


Fig. 5.



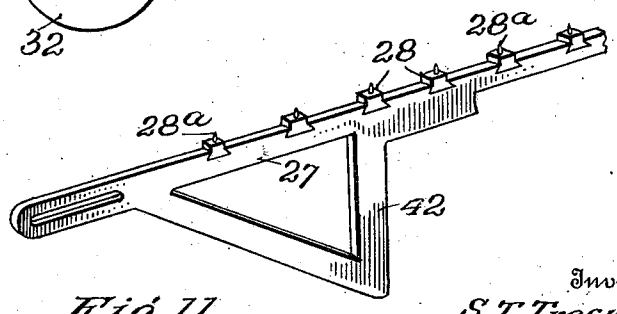


Fig. 11.

Witnesses

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6 SHEETS—SHEET 5.

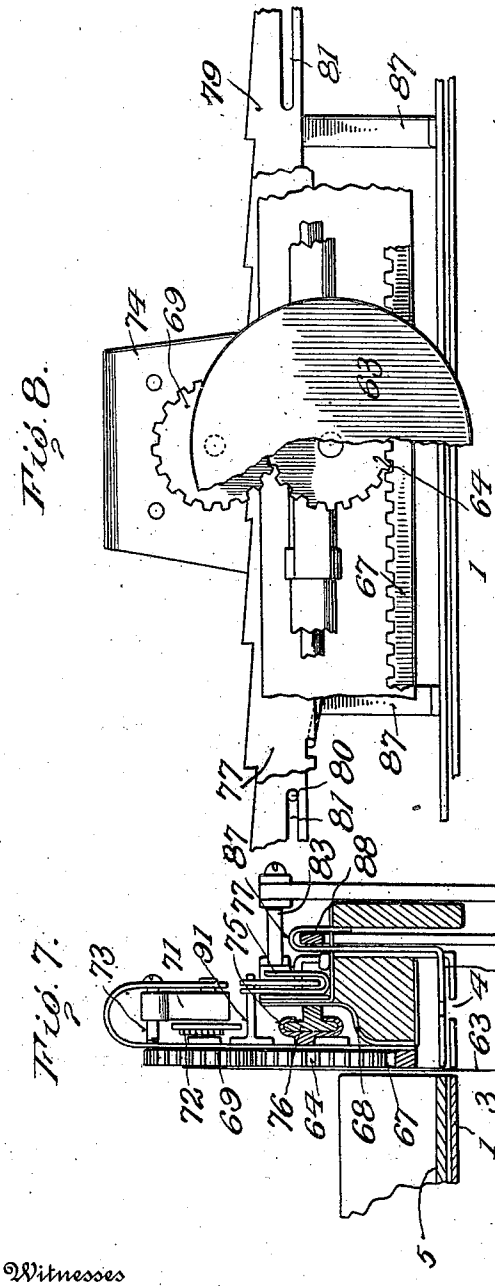


Fig. 8.

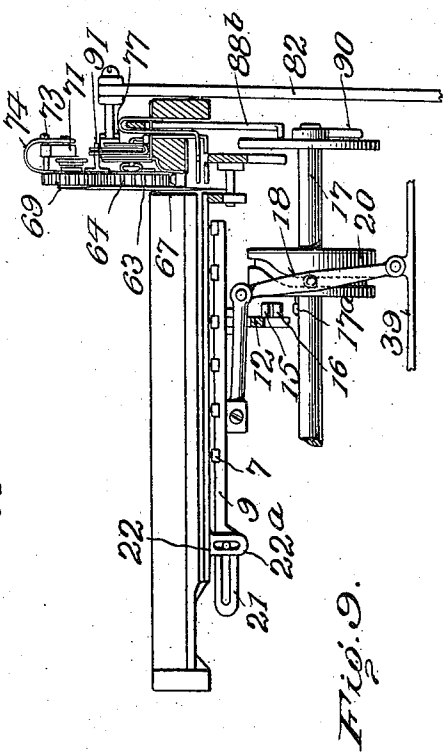


Fig. 9.

Fig. 7.

Witnesses

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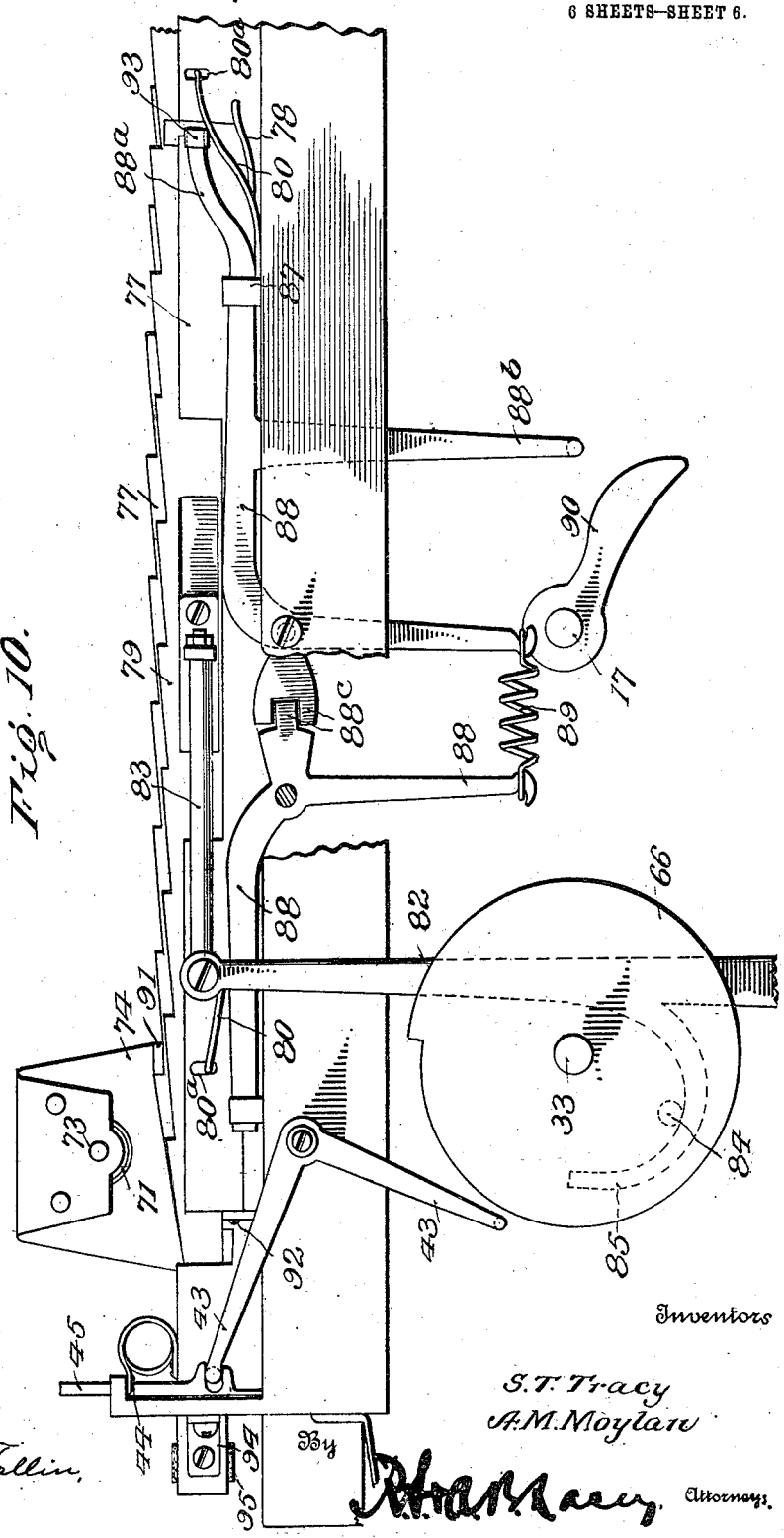
STAMP CUTTING MACHINE.

APPLICATION FILED DEC. 22, 1909.

989,734. Patented Apr. 18, 1911.

6 SHEETS—SHEET 6.

Fig. 10.



Witnesses

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UNITED STATES PATENT OFFICE.

SEAB T. TRACY, OF GAINESVILLE, GEORGIA, AND ALEXANDER M. MOYLAN, OF CENTURY, FLORIDA.

STAMP-CUTTING MACHINE.

989,734. Specification of Letters Patent. Patented Apr. 18, 1911.

Application filed December 22, 1909. Serial No. 534,499.

To all whom it may concern:

Be it known that we, SEAB T. TRACY and ALEXANDER M. MOYLAN, citizens of the United States, residing, respectively, at Gainesville and Century, in the counties of Hall and Escambia and States of Georgia and Florida, respectively, have invented certain new and useful Improvements in Stamp-Cutting Machines, of which the following is a specification.

This invention relates broadly to the class of sheet cutting machines and more specifically in its present embodiment and adaptation to machines for severing stamps.

The primary object of our invention is a stamp severing machine capable of using stamps in the sheet form in which they are at present supplied by the Post Office, and thereby possessing material advantages over that class of stamping machines which are so constructed that they can only operate upon stamps arranged in a roll.

A further object of the invention is a machine of this character which is so constructed and the parts of which are so arranged that the machine will be commercially valuable and useful as an important office adjunct for sealing and stamping mail matter. And a further object of the invention is, broadly, a simple, durable and efficient construction of machine which will take the sheet of stamps as they come from the government officials, perforated and gummed, and which will, by automatic means, sever a strip of stamps from the sheet, feed said strip forwardly with an intermittent motion, and sever one stamp after another at the proper time from the strip so that the stamp may be conveyed to the affixing point and moistened in its travel, while at the same time envelops that are conveyed one after another to the affixing point have the sealing flaps moistened and sealed in readiness to receive a moistened stamp which is applied thereto, the sealed and stamped envelop being deposited in any desired receptacle ready to be deposited in the mails.

While our invention is primarily designed for use in connection with an envelop sealing and stamp affixing machine, it is to be understood that the present invention is not limited to this use, but that the invention is broadly applicable for cutting sheets along predetermined lines.

With these main objects in view and with other objects that will be hereinafter set forth, the invention consists in certain constructions, arrangements and combinations of the parts which we shall now specifically describe and then point out the novel features, combinations and sub-combinations thereof in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a front elevation of one embodiment of our invention; Fig. 2 is a side elevation thereof; Fig. 3 is a top plan view of the machine, the knives and other portions of the machine above the bed of the feed table being omitted; Fig. 4 is a fragmentary plan view with the feed table entirely removed or omitted; Fig. 5 is a detail sectional view, the section being taken approximately on the line 5—5 of Fig. 3; Fig. 6 is a similar view, the section being taken substantially on the line 6—6 of Fig. 3, but with parts shown in Fig. 6 that are omitted in Fig. 3; Fig. 7 is a detail sectional view of the cutter that cuts the strip of, say, ten stamps from the sheet, this view looking from the front of the machine; Fig. 8 is a detail side view of the same, parts of some members being cut away in order to show parts of other members; Fig. 9 is a detail sectional view on the line 9—9 of Fig. 3; Fig. 10 is another detail side view of the strip cutter, showing the other side thereof with parts of the frame cut away in order to better illustrate the presser foot, lifter arms and their connections; Fig. 11 is a detail perspective view of the strip feeder, a portion thereof being broken away.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The framework of our improved machine may be of any desired design and construction so long as it subserves its purpose as a support for the various mechanisms and parts thereof, and it is preferably composed, as shown, of two main side castings provided with suitable brackets for the support of the different elements.

The feed mechanism for the stamps comprehends a feed table, the bed 1 of which is mounted at the upper end of the framework in a substantially horizontal plane, and which is formed with a series of transversely extending slots 2, a longitudinal cutter slot

3 and a longitudinal channel 4 to one side of and parallel with the cutter slot 3. A lid or cover 5 may be hinged to the framework to fold down over the bed 1, said cover being flat like the bed and being held in closed position slightly elevated from the bed so as to form a passageway or contracted chamber over which the sheet of stamps is intended to be slid. The cover 5 is preferably formed with grooves 6 adapted to register with the slots 2 when the cover is in closed position. The cover 5 in closed position terminates, as best seen in Fig. 7, flush with the cutter slot 3, thereby leaving a space which is occupied by a presser foot 86, hereinafter specifically described.

In order to feed the sheet over the surface of the table bed 1, we have provided a series of upright rubber feeders 7 mounted to travel, respectively, in the slots 2, each of said feeders being provided at its upper end with a short spur 8 adapted to so engage the sheet of stamps as to impart a positive motion thereto. These feeders 7 are mounted upon a feed rack 9 which is outlined in dotted lines in Fig. 3 and which is formed, as best seen in Figs. 1 and 6, with depending arms 10 having slightly rounded horizontally extending portions 11 arranged for a sliding movement in correspondingly shaped sockets formed in levers 12. These levers are mounted to rock slightly in a vertical plane and are swung by their outer ends from hangers 13 secured to and depending from the upper portion of the framework. The inner or adjacent ends of the levers as at 14 have a jointed connection with each other, and one of said levers is provided with a depending arm 15, (see Fig. 1) on which is formed a cam slot 16 which is engaged by a pin 17^a protruding from a cam disk 20 mounted to turn on a shaft 17. The sole purpose of the levers 12 is to raise and lower the feed rack 9 so that the feeders 7 may be brought into operative engagement with the sheet of stamps laid on the table, and be subsequently released therefrom, after the rack has moved the sheet across the table bed just preparatory to the severing of a strip from the sheet.

In order to actually feed the sheet across the bed 1, the rack 9 is mounted for a sliding movement in a transverse direction upon the levers 12 which form a support therefor, and to effect this sliding movement to feed the sheet we have provided a bar 18 which is secured at its upper end to the rack and which is pivotally mounted at its lower end upon a spreader bar 39 of the framework. This shifting lever or bar 18 is provided with a roller 19, as indicated in Fig. 6, said roller working in a curved groove in the periphery of the cam disk 20 that is mounted on the shaft 17.

The rear end of the feed rack 9 is slotted, as indicated at 21, and it is supported at its slotted end by means of pins 22 suspended from vertically slotted hangers 22^a depending from the bed 1 of the feed table so as to provide guiding means for the feed rack which will permit the rack to move both vertically and horizontally. As the shaft 17 turns, it will be understood that the levers 12 will be rocked to carry the feed rack 9 upwardly and will hold said rack at the upper limit of its movement with the feeders 7 in engagement with the sheet of stamps, while the continued movement of the shaft 17 will effect the lateral shifting of the rack by means of the groove in the periphery of the disk 20, so as to move all of the feeders within their slots and carry the sheet along the table bed until one strip of stamps shall have been projected out from under the cover 5 and over and beyond the channel 4 with the first line of perforations resting immediately above the cutter slot 3. The next action of the shaft 17 in its rotation is to lower the feed rack 9 so as to disengage it from the sheet of stamps, and to then direct the rack back to its initial position ready to feed the sheet to the right again when the proper time arrives. The strip of stamps which is thus projected over beyond the channel 4 with the first line of perforations resting immediately above the cutter slot 3, is severed by means of a rotary cutter 63, which, together with its correlated parts is best illustrated in Figs. 7, 8 and 10. The cutter 63 is in the form of a disk and has a circular or rotary traveling movement, operating in the cutter slot 3, and in its operation it severs a strip of ten stamps from a sheet, as above noted. The cutter 63 is secured to a spur gear wheel 64 which meshes with and travels along a rack 67, extending across the stamp table immediately above and parallel with the presser foot 86. This rack is secured to a frame 68 which in turn is secured to the main framework of the machine in any desired way. A companion gear 69 meshes into and drives the gear 64, both of said gears being journaled in a traveler frame 74, said frame being provided with a gib or key 75 which carries the traveler frame on a guide-way 76 fastened to the frame 68. Secured to the same shaft as the driving gear wheel 69 is a spiral spring 71 provided with a ratchet 72 to hold it at the required tension, one end of said spring being secured to a pin or screw 73 extending across the traveler frame 74, as best illustrated in Fig. 7. In a movement of the frame in one direction, namely, rearwardly the meshing of the gear wheel 64 with the rack 67 and the corresponding meshing of said wheel with the wheel 69, winds up the spring 71 and at the end of this movement the traveler frame 74 is released, whereby to permit the

spring to act to drive the frame forwardly and at the same time rotate the cutter disk 63 within the cutter slot 3, thereby quickly severing a strip of stamps from the sheet. The rearward movement of the traveler frame 74 is an intermittent one and is effected by the following mechanism:

A swinging bracket 77 formed in its upper edge with beveled teeth, as shown, is attached to the frame 68 with brackets and trunnion pins 92 in such a way that it can be swung outwardly from the traveler frame 74, against the tension of springs 78 by which is normally held in position both sidewise and upward. These springs 78 are secured to the bracket 77 at both ends of the latter. The ratchet teeth formed on the upper edge of the laterally swinging bracket 77, are designed to engage a pawl 91 which projects laterally from the traveler frame 74 so as to hold the same as it is intermittently moved rearwardly across the feed table, one notch at a time by a ratchet feeder strip 79 which works in the swinging bracket 77. The ratchet feeder strip 79 is held in sidewise and upper position by springs 80 which extend through slots 80[a] formed in one side of the bracket 77 and work in slots 81 formed in the strip 79 near the ends thereof. This ratchet feeder 79 works with an endwise movement forward and back the distance from one ratchet notch to another on the bracket 77, whereby to move the traveler frame 74 step by step rearwardly over the feed table, and at the same time wind up the spring 71. The strip 79 is operated by means of a rocker arm 82 connected to the strip as by a link 83, said rocker arm being provided with a hook shape extension 85 which is engaged by a pin 84 protruding from the side of a cam disk 66 on a shaft 33, said pin giving the arm 82 a forward and backward movement at each revolution of the shaft sufficient to move the ratchet tooth strip 79 the required distance to move the traveler frame 74 one notch on the ratchet tooth bracket 77, the frame being then held by the pawl 91, while the strip 79 recedes to its normal position. Each revolution of the shaft 33 repeats this movement and the traveling cutter 63 is thereby gradually carried one notch at a time across the feed table and out of the way of the sheet of stamps, which sheet is then brought forward by the movement of the feed rack 9 before described, so as to bring the stamps into proper position immediately over the cutter slot 3. The traveling cutter 63 is then automatically released and is driven by the spring 71 forwardly across the table along the cutter slot 3, thereby severing a strip of ten stamps from the sheet. The means for automatically releasing the traveler frame 74, to permit it to be driven forwardly, will be described after describing the presser foot 86, and the actuating mechanism therefor, of which latter such releasing means forms a part.

Coming now to the construction and operation of the presser foot 86, it will be seen that it lies over the bed 1 in the space formed by terminating the lid or cover 5 at the slot 3, and said presser foot is held raised by arms 88 and a cam 90 secured to the shaft 17 before mentioned, while the feed rack 9 moves the sheet of stamps laterally and places one row of ten stamps across the cutter slot 3 and under the presser foot. At this time, a downwardly extending arm 88[b] formed on one of the rocker arms 88 which are connected to the presser foot 86 by means of the brackets 87, is released from the cam 90 and the spring 89 which is connected to the lower ends of both of these bell crank rocker arms 88, draws said ends together and rocks the arms in a direction to force the presser foot 86 firmly down upon the strip of ten stamps, holding the same while they are severed from the sheet by the rotary cutter 63. The presser foot is then raised and lowered in turn by the strip feeding rack 27, as the latter is operated forwardly and backwardly to move the strip of stamps forward to be cut off by a knife 45. The presser foot will obviously yield in an upward direction, and hence will serve as a backing from the rack 27 as the latter is moved upwardly and then forwardly to carry the strip of stamps underneath the knife. The knife 45 is mounted in a bracket of the framework, as best illustrated in Fig. 10, and is pressed downwardly by means of a spring 44. It is raised by means of a bell crank 43 which is fulcrumed at its elbow on the framework, and which has one arm engaging the knife, as shown, the other arm of said bell crank extending downwardly and being engaged and operated by a cam disk 66 secured to the shaft 33 before mentioned. By means of this disk 66 and bell crank 43, the cutter 45 is held in raised position until the strip of stamps has been brought forwardly by means of the feed rack 27, whereupon the downwardly extending arm of the bell crank drops into a notch on the rim of the cam disk 66, thereby releasing the spring 44 controlling the slip forming knife 45 and causing the said knife to descend and snip off a stamp, the knife being at once raised again and held in raised position as the disk 66 continues to revolve, until the proper time arrives for severing another stamp from the strip.

The same movement of the arms 88 and cam 90, which releases the presser foot from a raised position, releases the strip forming cutter 63 by the following means: There is an extension 88[a] formed on one of the arms 88 which in the downward movement of the arm engages a trip bracket 93 connected to

the ratchet tooth bracket 77 which tilts said bracket and its coacting ratchet strip 79 on the trunnions 92, thereby releasing the pawl 91 so as to permit the latter to slip along the side of the strip 79 below the throat of the teeth so as to avoid catching on the teeth in this free movement of the pawl, and as soon as the pawl passes the front end of the bracket 77, said bracket is released and by its springs 78 rights itself up to its normal position. The guide 76 for the traveler frame 74 has an angular bracket 94 secured to its front end, and a buffer block 95 of rubber or the like is secured to said bracket 94 so as to constitute an easy stop for the traveling cutter and its frame. 88[c] designates interlocking segments which are formed on the respective arms 88 by which said arms are maintained at a uniform stroke in the movement of the presser foot 86.

The mechanism for intermittently moving the severed strip forwardly so that one stamp at a time may be cut therefrom by the reciprocating knife 45 is constructed and operated as follows: The strip feeder is in the form of a longitudinally extending and vertically disposed rack 27 (see Fig. 11) which carries a series of upwardly extending strip feeders 28 projecting into the channel 4 and provided with spurs 28[a] adapted to impinge against the underside of the strip. (See Fig. 5.) The rear end of the strip feeding rack 27 is formed with a longitudinal slot 29 and is guided in its back and forth movements by means of a pin 30 accommodated in said slot. The rack 27 is provided at one side and preferably at about its middle with a roller 31, adapted to be engaged by a lifting cam 32 mounted on the shaft 33. Thus the rack is raised and lowered into and out of operative contact with the severed strip of stamps, and in order to move the rack forwardly while it is held in raised position by the cam 32, said rack is provided with a pivoted arm 34 formed at its forward extremity with a downwardly facing hook 35 adapted to be engaged by a pin 36 projecting from one side of the stamp conveyer 37. The conveyer 37 is mounted to turn with the shaft 38, and as the said shaft revolves its pin 36 will engage the hook 35 and pull the feed rack 37 forwardly until the strip shall have been moved far enough to project the stamp beyond the knife 45. As the cam disk 32 continues to rotate and finally permits the rack 27 to lower, the arm 34 will descend upon a stationary trip pin 40. When the arm 34 comes in contact with said pin while the rack is thus lowering, the pin 40 will manifestly swing the arm 34 relatively upward, thereby causing the disengagement of the hook 35 from the pin 36, and at the same time the roller 41 on the cam disk 32 will engage the depending bracket 42 which is formed on the rack and thereby return the rack to its initial rearward position.

After the stamp has been cut from the strip by the knife 45, it is impinged upon relatively short spurs or prongs 46[a] on a stamp pad 46, which may be formed of rubber or the like partially embedded in the periphery of the rotary stamp conveyer or drum 37 mounted on the shaft 38. As this conveyer rotates, the stamp will be carried forwardly and downwardly behind curved guides 24 extending partially around the periphery of the drum or conveyer 37 and secured at their upper ends to the framework, as by a screw 25. It is thus held until it reaches the lowermost point in the travel of the pad 46, which in the present embodiment of the invention is the point at which the stamp is affixed to the envelop, and in this travel of the stamp it will have its gummed face moistened by a roller 49 which is fed from a reservoir 50, the roller and reservoir being held in brackets which project forwardly from the main side castings of the framework, as illustrated in Fig. 2.

The envelops to be sealed and stamped are set edgewise in a stacking box 51 and are raised in any desired way so far as this present invention in concerned, for instance, in the manner disclosed by our prior Patent No. 887,829, issued to us the 19th day of May, 1908, to engage rollers 58 and 59 mounted on shaft 57 and 60, said rollers being turned in any desired way, so as to carry the sealed envelop from the sealing rollers 58 and 59 onto an envelop conveyer 61 which is in the form of a revolving cylinder mounted upon a shaft 62 and provided in its periphery with any desired number of spikes 63[a] designed to engage the envelop so as to insure the positive movement of the same on said conveyer. These spurs or prongs 63[a] come into contact with the envelop immediately after the envelop has been sealed by the sealing rollers and they serve to carry the envelop to the stamp affixing point, the envelop passing under curved guides 65. As the cylinder 61 revolves, the envelop is carried upwardly thereon and the envelop passes under the guides 65 and its upper right hand corner meets the stamp as the latter is carried downwardly toward it by the oppositely rotating stamp conveyer 37. The peripheries of the two cylinders (37 and 61) are in such proximity that the stamp will be firmly pressed against the face of the envelop and caused to adhere thereto, and the then stamped and sealed envelop will be carried rearwardly and discharged into any suitable receptacle.

The detail operation of the various mechanisms, and their correlated movements having been hereinbefore set forth in detail in connection with the details of description

of the structural features, we deem it unnecessary to further set forth the operation except in a general way, after having first now described the gearing which is used in the present embodiment of the invention to impart motion to the various parts.

The main shaft of the machine is the shaft 33 which may be provided with a crank handle A to turn it, although it is obvious that any other means may be employed for this purpose. On the drive shaft 33 is fixed a tappet wheel B provided with one tooth *b* adapted to successively engage with the teeth in the notched disk C which is mounted on the shaft 17. As there are ordinarily at the present time, ten stamps in a strip, considered lengthwise, there are ten teeth or notches in the disk C to the one tooth on the tappet wheel B, so that the shaft 33 will be turned ten times to feed one stamp after another from the strip to the knife, before the shaft 17 shall have made one complete revolution to shift the sheet quickly to the right and sever another strip. There is also on the drive shaft 33 a gear wheel D which meshes with a gear wheel E on the shaft 38. To drive the latter there is also a spur wheel F which meshes with a similar wheel G on the shaft 62. The two gear wheels G and F are so proportioned that the stamp conveyer 37 will make two revolutions to one revolution of the envelop conveyer cylinder 61. There is also on shaft 62 a spur wheel H which meshes with a relatively small wheel I on the shaft 57 of one of the sealing rollers, (58) and said shaft 57 carries a pinion which meshes with a similar pinion on the shaft 60 so as to drive the other sealing roller 69 (see Fig. 2).

From the foregoing description in connection with the accompanying drawings, it is manifest that we have provided a very comprehensive and efficient machine of this character which will operate automatically and carry out the entire operation of sealing envelops and affixing stamps thereto from the sheets just as they are at present supplied from the post office, and it is to be understood that the invention is not limited to a sheet of stamps 10x10, or 5x5, or to any particular number of stamps, the present embodiment of the invention being illustrated for sheets of these sizes, merely because at the present time the Government officials print the stamps on sheets of this character.

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

1. In a machine of the character described, the combination of a feed table, provided with a bed formed with a series of slots and a cutter slot extending at right angles to the series of slots, a rack operating underneath the bed and provided with a series of upright feeders working in said slots, said feeders being formed in their upper extremities with spurs adapted to engage a sheet of stamps laid on the bed, a rotary traveling knife adapted to operate in the cutter slot, means for shifting the rack toward the cutter slot in a raised position and for subsequently lowering the rack and turning it in a lowered position, means for holding the knife at one end of said slot during the actuation of the rack, and means for driving the knife across the slot to sever a strip from the sheet.

2. In a machine of the character described, the combination of a feed table provided with a bed, said bed being formed with a cutter slot, means for shifting a sheet of stamps over the bed so that a strip thereof will lie over and beyond the cutter slot, a traveling knife working in said slot, means for holding said knife at one end of the slot during the actuation of the sheet shifting means, means for automatically releasing and driving the knife along the cutter slot subsequent to the completion of the shifting movement, whereby to sever the strip from the sheet, means for intermittently severing stamps from the strip, and means for moving the knife backwardly in the slot during the stamp severing operation.

3. In a machine of the character described, the combination of a feed table provided with a bed, said bed being formed with a cutter slot, means for shifting a sheet of stamps over the bed so that a strip thereof will lie over and beyond the cutter slot, a traveling knife working in said slot, means for holding said knife at one end of the slot during the actuation of the sheet shifting means, means for automatically releasing and driving the knife along the cutter slot subsequent to the completion of the shifting movement, whereby to sever the strip from the sheet, means for intermittently severing stamps from the strip, and means for intermittently moving the knife backwardly in the slot during the stamp severing operation.

4. In a machine of the character described, the combination of a feed table provided with a bed having a cutter slot, means for shifting a sheet of stamps over the bed so that a strip thereof will lie over and beyond the slot, a rotary traveling knife movable in said slot, means for holding the knife at one end of the slot during the sheet shifting operation, means for automatically releasing the knife and driving it along the slot to sever a strip from the sheet immediately subsequent to the completion of the sheet shifting movement, and a presser foot arranged to press upon the strip as it is severed by said knife.

5. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for feeding

the sheet across the table, a rotary cutter arranged to sever a strip from the sheet, means for intermittently feeding the severed strip over the table, means for intermittently severing the stamps from the strip, means for holding the knife inoperative during the sheet feeding operation, means for automatically releasing the knife from said holding means and for actuating the knife subsequent to the completion of the sheet feeding operation, and means for working the knife backwardly during the severing of stamps from the strip.

6. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for feeding the sheet over the table, the table being provided with a slot over which a strip of stamps is adapted to be placed by the operation of the sheet feeding means, a rotary cutter working in said slot, a traveler frame carrying said cutter and arranged to move along the slot, means for supporting said frame in its movement, means carried by said frame for rotating the cutter, means for automatically severing stamps from the strip severed by the cutter, means for moving the said frame rearwardly along the slot during the operation of the stamp severing means, means for automatically setting the sheet feeding means into operation when the traveler frame has reached the rear end of the cutter slot, and means for subsequently releasing the traveler frame to permit the cutter actuating means to operate, said means being also arranged to drive the frame forwardly to the front of the slot.

7. In a machine of the character described, the combination of a feed table provided with a bed having a cutter slot, a traveler frame supported to move along the slot, a rotary knife working in the slot and carried by said frame, means for automatically driving the frame from the rear end to the front end of the slot and for simultaneously rotating the cutter, and means for working the frame backwardly from the front end to the rear end of the slot, said last named means embodying a toothed bracket, a reciprocating toothed bar co-acting with said bracket, and a pawl secured to the traveler frame and projecting across the teeth of the bar and bracket.

8. In a machine of the character described, the combination of a feed table provided with a bed having a cutter slot, a traveler frame supported to move along the slot, a rotary knife working in the slot and carried by said frame, means for automatically driving the frame from the rear end to the front end of the slot and for simultaneously rotating the cutter, means for working the frame backwardly from the front end to the rear end of the slot, said last named means embodying a toothed bracket, a reciprocating toothed bar co-acting with said bracket, a pawl secured to the traveler frame and projecting across the teeth of the bar and bracket, the bracket being laterally tiltable, and means for tilting the bracket laterally so as to release it and the toothed bar from the pawl.

9. In a machine of the character described, the combination of a feed table provided with a bed having a cutter slot, a traveler frame supported to move along the slot, a rotary knife working in the slot and carried by said frame, means for automatically driving the frame from the rear end to the front end of the slot and for simultaneously rotating the cutter, means for working the frame backwardly from the front end to the rear end of the slot, said last named means embodying a toothed bracket, a reciprocating toothed bar co-acting with said bracket, a pawl secured to the traveler frame and projecting across the teeth of the bar and bracket, the bracket being laterally tiltable and spring pressed to an upright position and the toothed bar being carried by and movable with the bracket in the lateral movement thereof, and means for tilting the bracket and bar laterally out of engagement with the pawl when the traveler frame reaches the rear end of the slot.

10. In a machine of the character described, the combination of a feed table provided with a bed having a cutter slot, a traveler frame supported to move along the slot, a rotary knife working in the slot and carried by said frame, means for automatically driving the frame from the rear end to the front end of the slot and for simultaneously rotating the cutter, means for working the frame backwardly from the front end to the rear end of the slot, said last named means embodying a toothed bracket, a reciprocating toothed bar co-acting with said bracket, a pawl secured to the traveler frame and projecting across the teeth of the bar and bracket, a pivoted arm having a link connection with the toothed bar to reciprocate the same, and a cam disk adapted to engage said arm to swing the same back and forth.

11. In a machine of the character described, a strip forming rotary cutter, a feed table provided with a slot in which the cutter works, a traveler frame supported to move along the slot, said frame carrying said rotary cutter, means including a reciprocating bar for working the traveler frame from the front end of the slot toward the rear thereof, a cam disk adapted to actuate said bar, a slip forming knife adapted to sever portions of the strip formed by the cutter, and a bell crank adapted to actuate said slip forming knife, the cam disk being formed with a notched periphery adapted to engage said bell crank to operate the slip forming knife

in addition to the bar which works the travel frame rearwardly.

12. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, a strip severing cutter, means for shifting the sheet over the table so that a strip can be cut therefrom, means for holding the cutter in an inoperative position during the sheet feeding operation, a presser foot adapted to hold the strip while it is being severed, and means actuated by the presser foot to release the cutter from said holding means.

13. In a machine of the character described, a rotary cutter, a traveler frame carrying said cutter and supported for a reciprocating movement, means for intermittently moving the traveler frame in one direction, said means including a laterally tiltable toothed bar co-acting with said bracket, the frame being provided with a pawl designed to be engaged by said bar and bracket, a presser foot adapted to hold a sheet while a strip is being severed therefrom by the cutter, and a connection between the presser foot and bracket arranged to tilt the bracket and bar laterally out of engagement with the pawl.

14. In a machine of the character described, the combination of a feed table adapted to support a strip of stamps and formed with a channel, a rack mounted underneath the table and provided with feeders projecting upwardly into the channel and adapted to engage the strip, a knife for clipping the stamps from the strip one at a time mounted at one end of the table, a spring adapted to actuate said knife, a bell crank operatively connected to said knife, means for reciprocating the rack, and a cam disk arranged to normally hold the knife elevated by engagement with one arm of the bell crank, the cam being formed with a notch to which the arm is adapted to fall whereby to permit the spring to act and operate the knife.

15. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for feeding the sheet across the table, a rotary traveling cutter adapted to travel across the table to sever a strip from the sheet, means for holding the cutter in an inoperative position during the feeding of the sheet, means for automatically releasing the cutter upon the completion of the sheet feeding operation, means for subsequently severing stamps from the severed strip, and means for automatically returning the cutter to its initial position during the operation of severing the stamps from the strip.

16. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for severing a strip from the sheet, a presser foot adapted to hold the strip as it is severed, bell cranks connected to said presser foot and having segment connection with each other, as specified, a compression spring tending to draw corresponding arms of said bell cranks together whereby to lower the presser foot, one of said bell cranks being provided with a depending arm, and a cam adapted to strike said arm and raise the presser foot.

17. In a machine of the character described, a rotary strip forming knife, a toothed pinion to which said knife is connected, a traveler frame in which said pinion is journaled, a spring driven pinion also journaled in said frame and meshing with the first-named pinion, a support with which the frame is connected for a reciprocating movement, a rack carried by said support and meshing with the first-named pinion, means for moving the frame in one direction to wind up the spring, and means for subsequently releasing the frame to permit the spring to act.

18. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for feeding the sheet across the table, a rotary traveling cutter adapted to travel across the table to sever a strip from the sheet, means for holding the cutter in an inoperative position during the feeding of the sheet, means for severing the stamps from the severed strip, and means for returning the cutter to its initial position during the operation of severing the stamps from the strip.

19. In a machine of the character described, the combination of a feed table adapted to support a sheet of stamps, means for feeding the sheet across the table, a traveling cutter adapted to travel across the table to sever a strip from the sheet, means for holding the cutter in an inoperative position during the feeding of the sheet, means for subsequently severing stamps from the severed strip, and means for moving the cutter to its initial position during the operation of severing the stamps from the strip.

In testimony whereof I affix my signature in presence of two witnesses.

SEAB T. TRACY. [L. S.]

Witnesses:
A. R. BAKER,
W. R. WINBURN.

In testimony whereof I affix my signature in presence of two witnesses.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."