

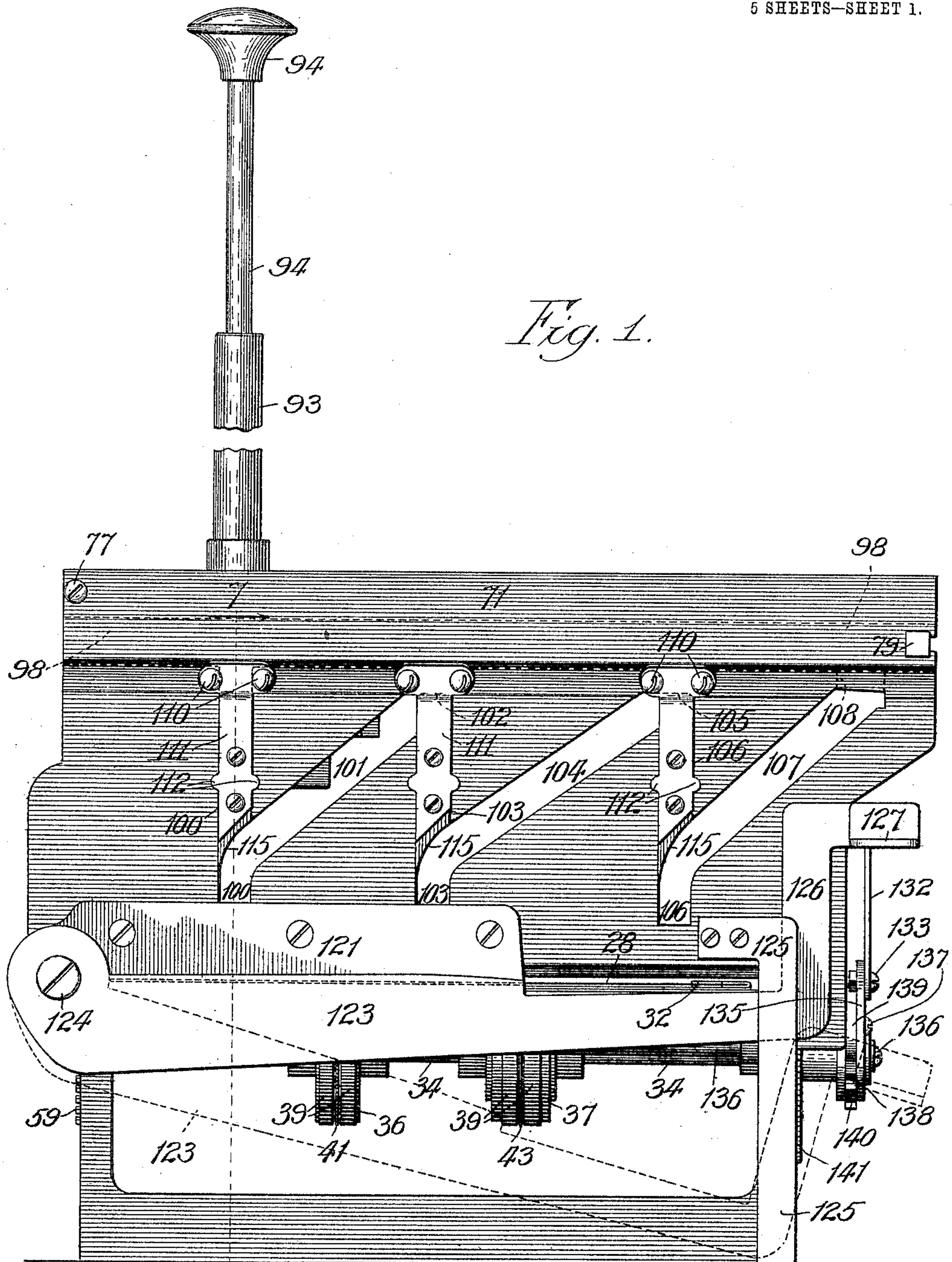
No. 817,421.

PATENTED APR. 10, 1906.

J. P. EASTMAN & T. F. HAWLEY.  
TICKET PRINTING AND ISSUING MACHINE.

APPLICATION FILED MAR. 20, 1905.

5 SHEETS—SHEET 1.



Witnesses:  
*Edw. L. Chayford.*  
*John Enders.*

Inventors:  
*John P. Eastman and*  
*Tracey F. Hawley,*  
By *Cheever & Cox*  
Att'ys.



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5 SHEETS—SHEET 2.

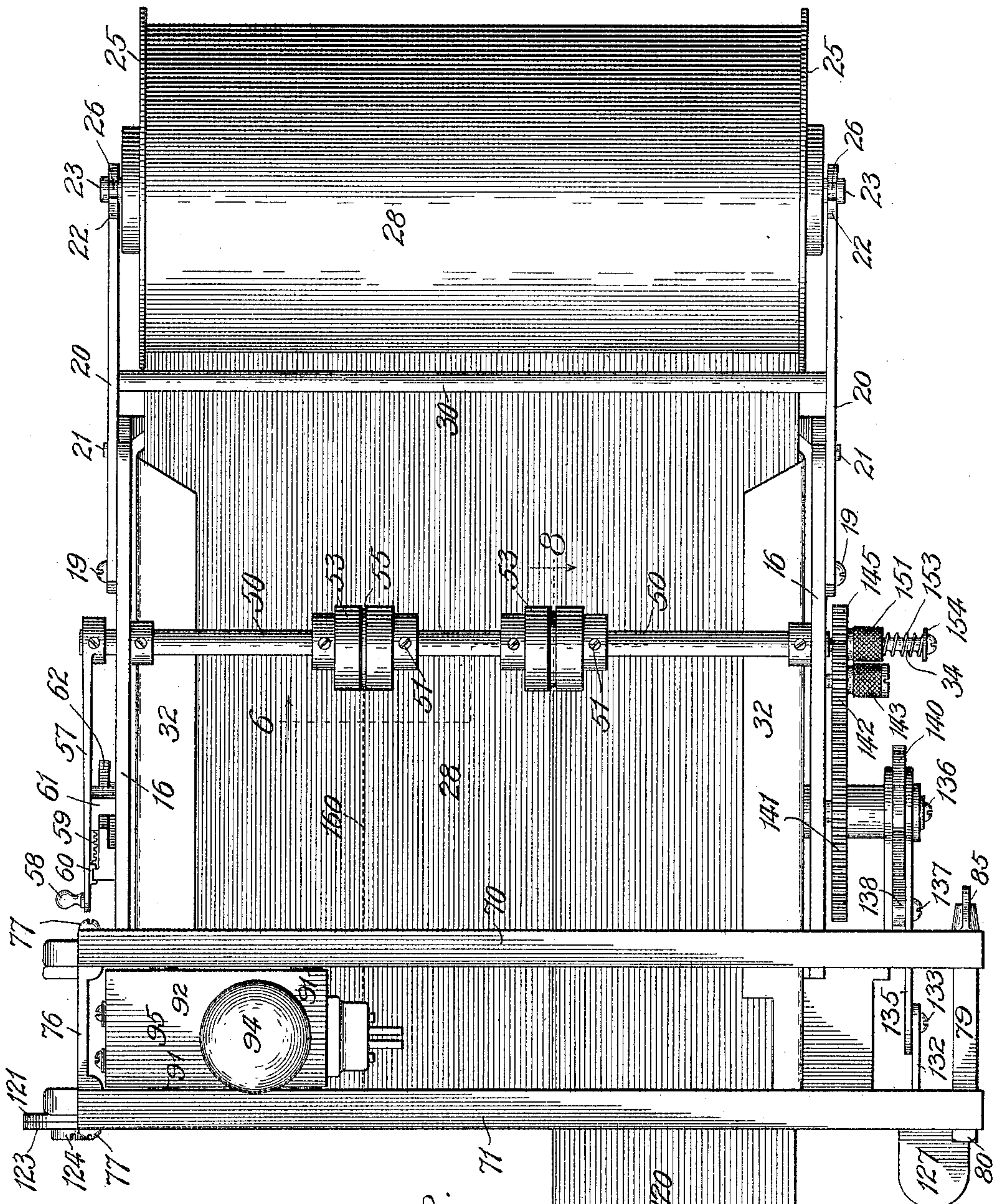


Fig. 2.

Witnesses:  
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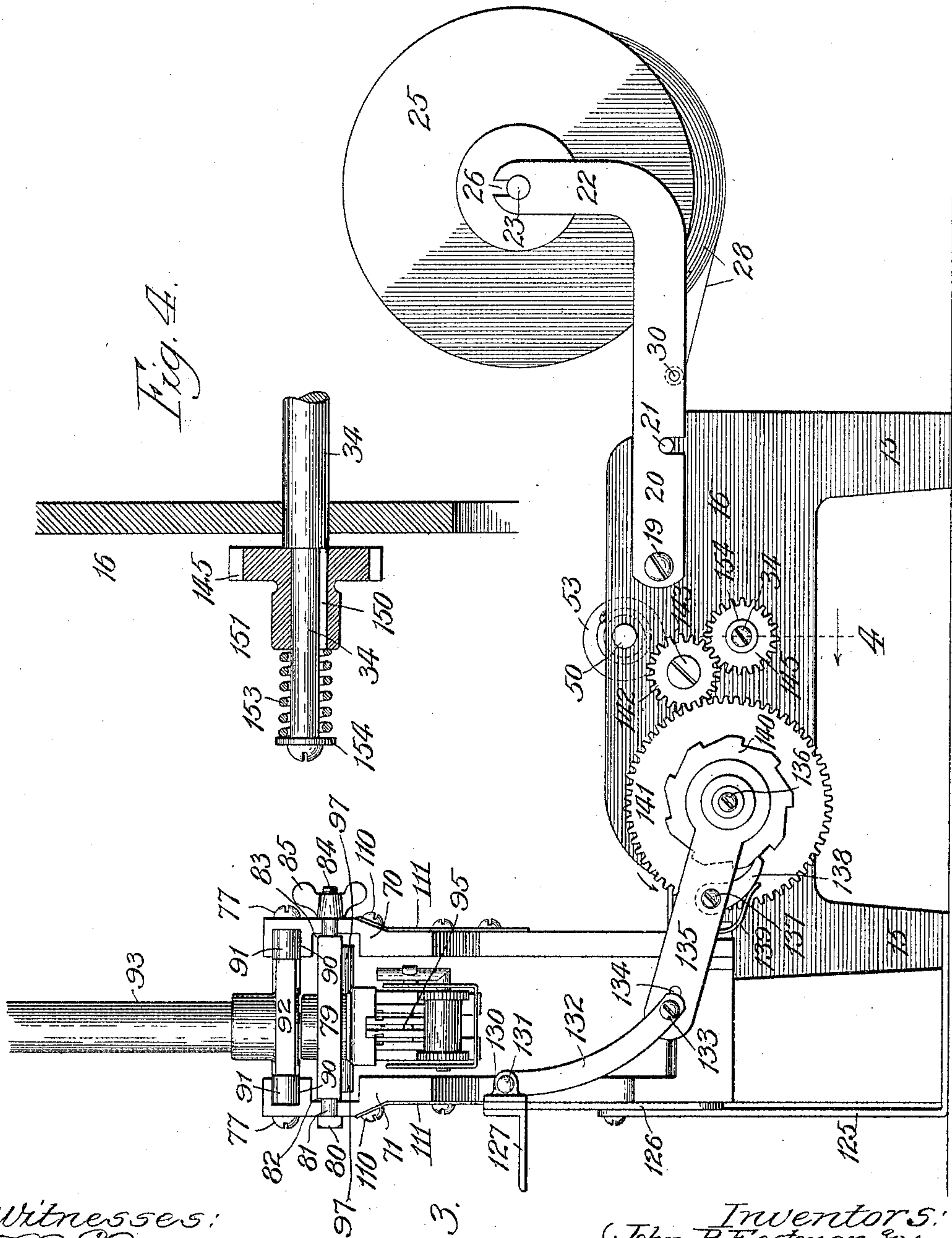
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5 SHEETS—SHEET 3.



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Fig. 3.

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5 SHEETS—SHEET 4.

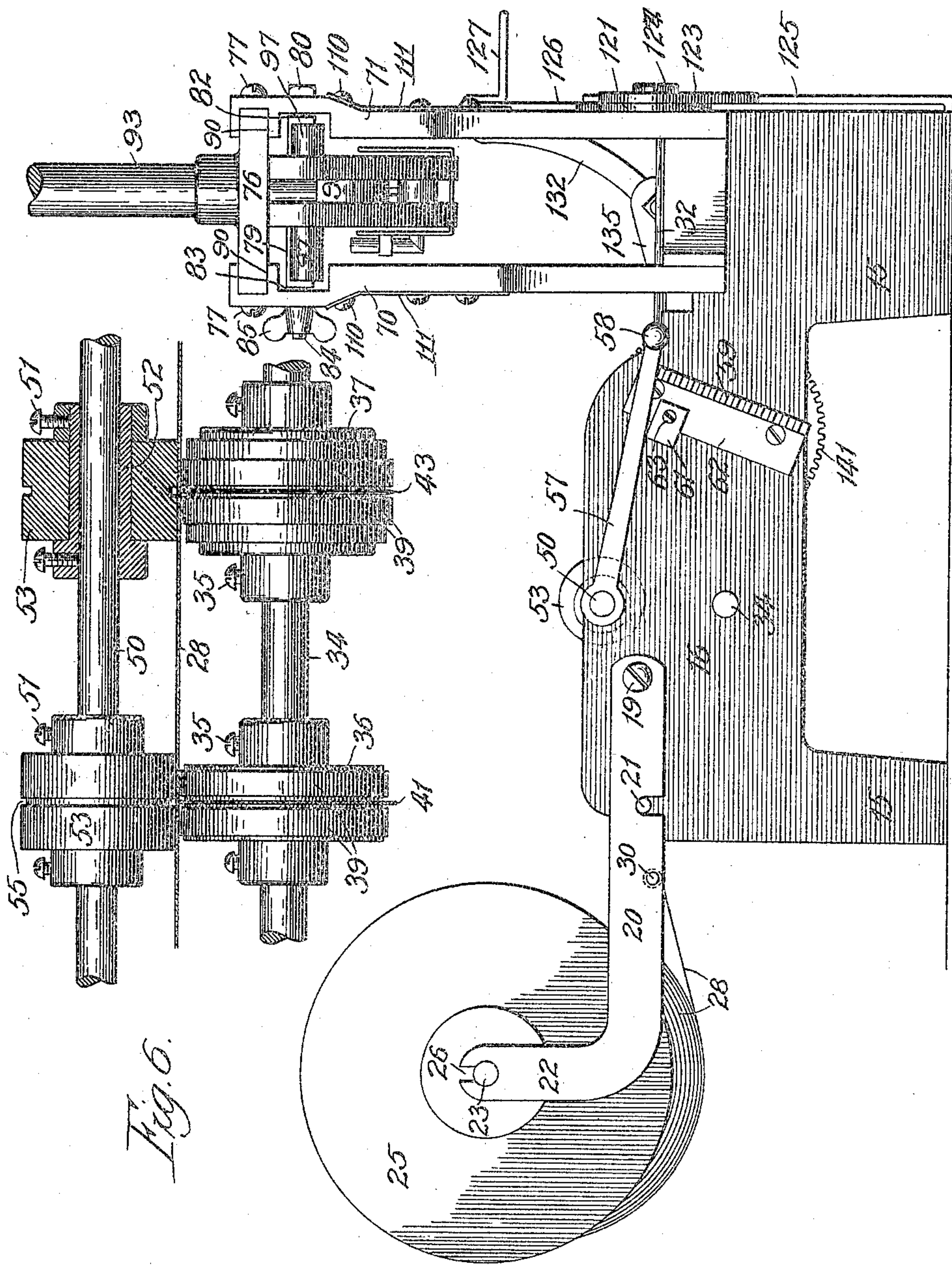


Fig. 6.

Fig. 5.

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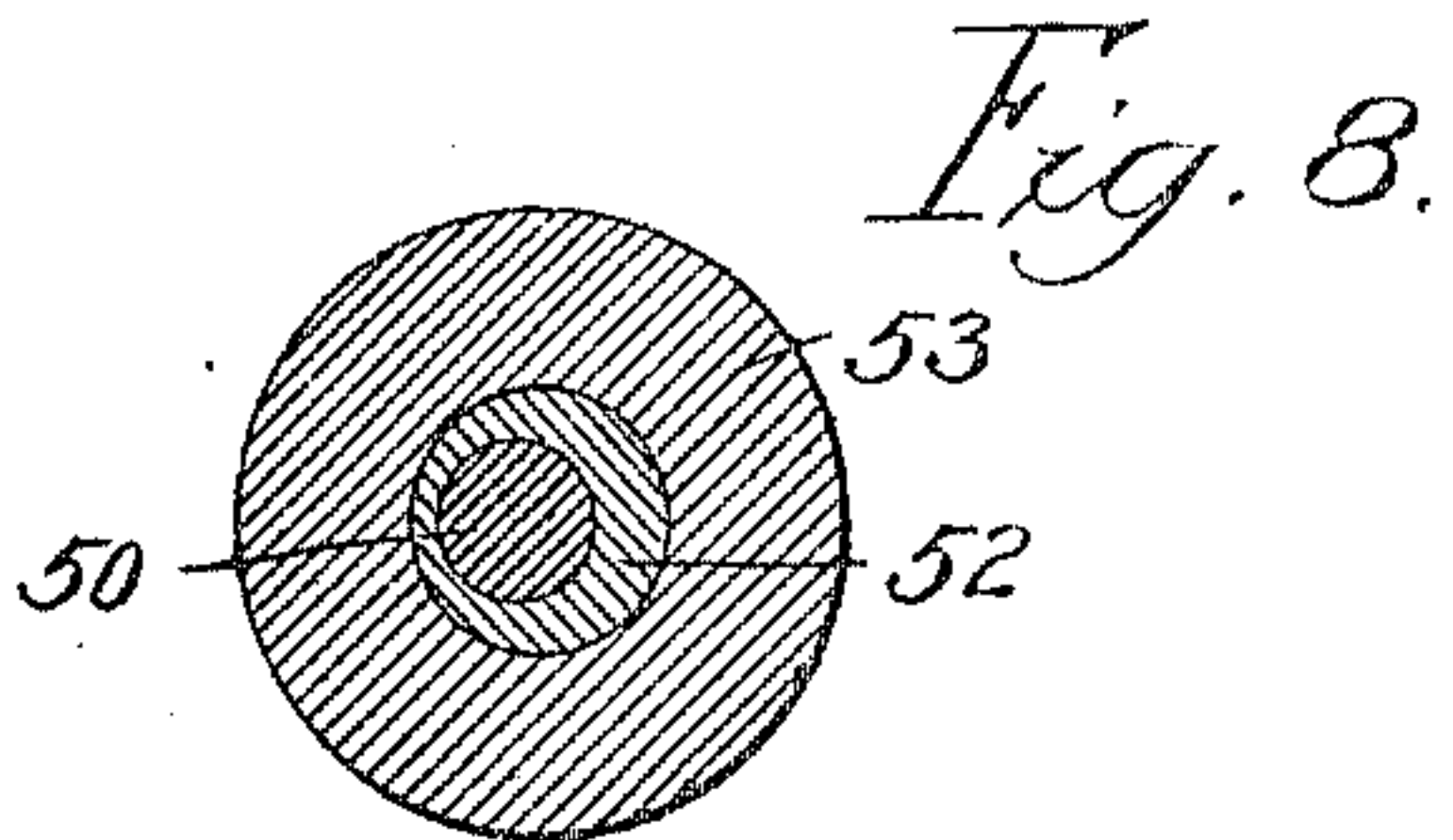
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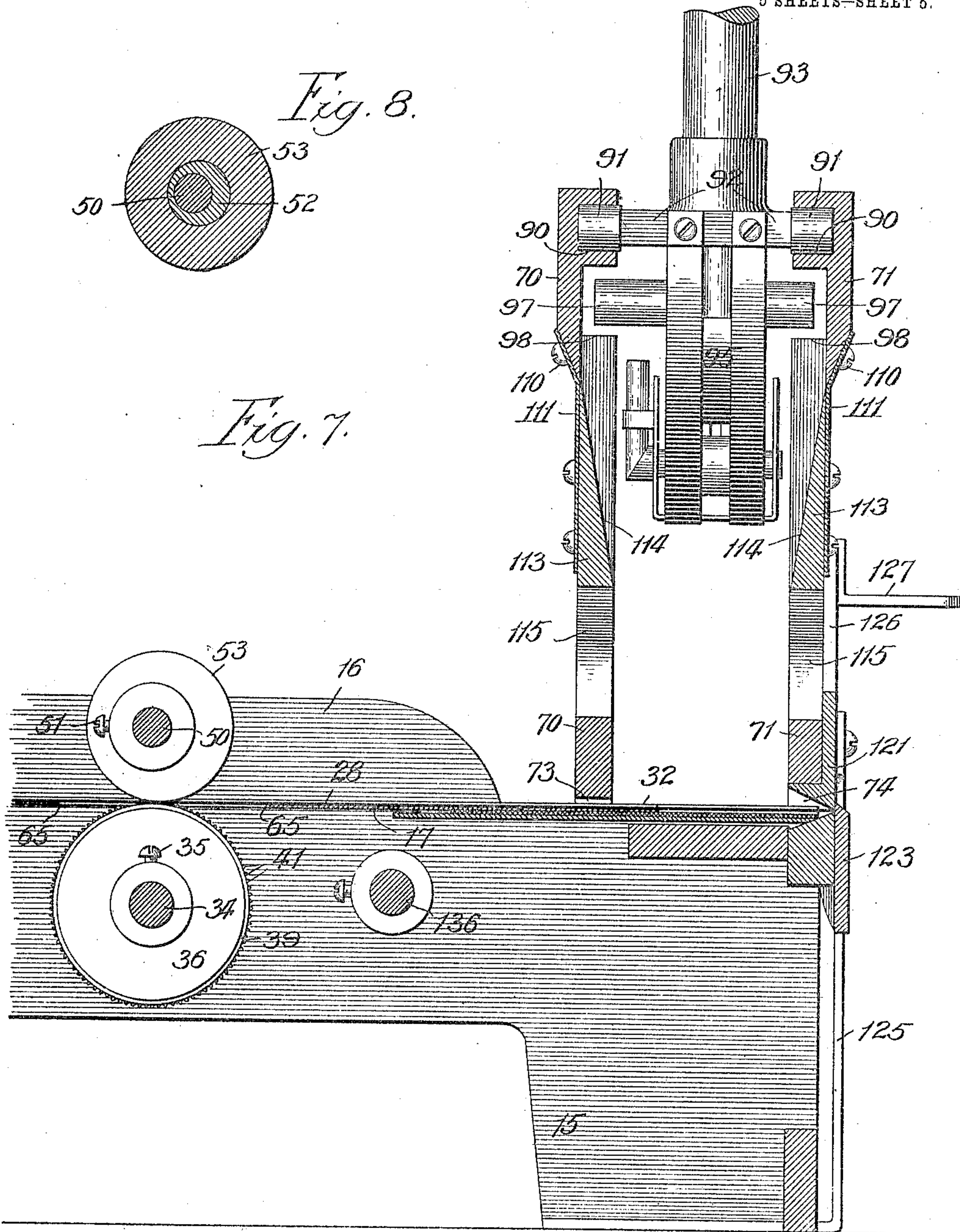
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5 SHEETS—SHEET 5.



*Fig. 7.*



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# UNITED STATES PATENT OFFICE.

JOHN P. EASTMAN, OF CHICAGO, ILLINOIS, AND TRACY F. HAWLEY, OF MILWAUKEE, WISCONSIN.

## TICKET PRINTING AND ISSUING MACHINE.

No. 817,421.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed March 20, 1905. Serial No. 251,122.

*To all whom it may concern:*

Be it known that we, JOHN P. EASTMAN, residing at Chicago, in the county of Cook and State of Illinois, and TRACY F. HAWLEY, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, citizens of the United States, have invented a certain new and useful Improvement in Ticket Printing and Issuing Machines, of which the following is a specification.

Our invention relates to mechanism for printing railroad-tickets or parts of the same and issuing them at the specific time they are wanted for use.

The invention here in question is in a general way an improvement upon our United States Letters Patent No. 725,054 for a ticket printing and issuing machine issued to us April 14, 1903, though some parts of the device here illustrated are wholly different from those employed by us in said patent.

The machine may be used on many sorts of tickets; but as it is especially useful when applied to railroad-tickets it will be described as applied to that use.

The usual ticket system in use on railroads requires a station-agent at any given point to keep a stock of separate tickets to each principal station on the road and blank tickets for use to less important stations in which the name of the destination has to be printed by rubber stamp or written by hand. This system is very inconvenient and expensive in that it requires a large idle investment in such tickets and in the space and cases to hold them. It also involves a great deal of trouble and liability of error in accounting, and such tickets are always subject to theft and forgery.

The object of our invention is to provide a machine which will cost comparatively little and can be easily and cheaply operated which will print and issue tickets to any station on the road from a continuous roll of paper.

Another object of our invention is to provide such a mechanism which will print the ticket in such a form that it cannot be readily counterfeited or altered and at the same time provide a record within the machine on which an accurate accounting of the tickets issued can be had.

The invention consists of a machine capable of accomplishing the above-mentioned and other objects which can be easily and

cheaply made and installed, which is efficient in operation, and not readily liable to get out of order.

It also consists of many details of construction, which will be hereinafter more fully described and claimed as the specification proceeds.

We have illustrated our invention in its preferred form by drawings, in which—

Figure 1 is a front view of the machine. Fig. 2 is a plan view, while Fig. 3 is a side view, of the device. Fig. 4 is a sectional detail view on line 4 of Fig. 3. Fig. 5 is a view taken upon the opposite side from that of Fig. 3. Fig. 6 is a detail view of the feed-rollers of the device, taken on line 6 of Fig. 2. Fig. 7 is a vertical sectional detail view taken on line 7 of Fig. 1. Fig. 8 is a sectional detail view taken on line 8 of Fig. 2.

Supported upon legs 15 at opposite sides of the machine are side frames 16 of a paper-supporting table 17, over which a paper is adapted to pass for the purpose of being printed and issued in the form of a ticket, as described in our prior patent.

Pivoted upon opposite sides of the machine upon the side frames 16 on screws or bolts 19 thereon, are rearwardly-extending arms 20, which detachably rest upon pins 21 on the side frames. The extreme rear portions of these arms 20 are bent upward in the vertical portion 22 and have journaled in them at 23 a spool 25 or other similar paper-carrying device. The journals 23 of this spool are removable from the uprights 22 through the notches 26, as shown. When the device is in operation, the spool 25 for the paper 28 is in the position shown in Fig. 5 at the rear of the machine; but when the device is not in use and it is desired to put the machine in a compact space the supporting-arms 20, with the spool upon them, may be rotated about the pivots 19 to the right in Fig. 5 until the spool 25 is above the table and against the stamp-case, to be hereinafter described, in this position being entirely clear of the rear of the table. The paper 28 is taken off from the spool 25 and passed under the roller 30 onto the table 17 and inside of horizontal paper-guiding U-shaped pieces 32, which extend along the top of the table, as shown in Fig. 2, and serve to prevent the edges of the paper being torn.

Journaled below the table 17 in the side



frames 16 is a crosswise shaft 34. Rigidly secured to this shaft 34 by means of set-screws 35 or other suitable means are two feed wheels or rolls 36 and 37, spaced about  
 5 as shown in Fig. 1 with reference to the width of the table. On the circumferences of these wheels 36 and 37 are rubber or other compressible tires or bands 39, there being two on each wheel spaced as shown in Fig. 6.  
 10 In the middle of wheel 36 between these tires 39 we mount circumferentially of the wheel a set of teeth or prongs 41, adapted in the manner to be hereinafter described to perforate the paper 28 passing over the wheel  
 15 or roll, and similarly in the center of wheel 37 we mount a circular knife 43, adapted to cut the paper 28 passing over the wheel or roll 37.

In the upper portion of the frame 16 and  
 20 directly above the shaft 34 we mount another shaft 50, having secured to it by screws 51 or other suitable means eccentric bearings 52, on which supplemental wheels or rollers 53 are journaled directly above the  
 25 rollers 36 and 37, heretofore described. These rollers 53, just described, have cut in their circumferences notches or recesses 55, located directly over the teeth 41 and the knife 43, heretofore described, so that when the  
 30 wheels 53 are by mechanism to be hereinafter described forced down upon the feed rolls or wheels 36 and 37 the perforating-teeth 41 and knife-edge 43 may pass through the paper 28 into these grooves 55 and rotate without injury to themselves.  
 35

Rigidly secured to one end of shaft 50 is a lever-arm 57, (best shown in Fig. 5,) having on its end a handle 58, adapted to be grasped by the operator. On the side frame 16 and  
 40 between the frame and this handle is mounted a toothed rack 59, having in its face notches in which a corresponding tooth 60 on the lever 57 is adapted to fit. The lever 57 is of spring material, so that it may be moved  
 45 up and down the rack 59 to different positions, thereby rotating the shaft 50 part way round on its axis, thereby changing the positions of the eccentrics 52, and consequently the position and degree of pressure of the  
 50 rollers 53 upon the rollers 36 and 37. In order to insure a uniform pressure at different times of these rollers 53 upon the feed-rolls 36 and 37, we provide a stop 61, adapted to slide up and down the portion 62 of the rack  
 55 59 and be secured in position by the set-screw 63. The operator determines by trial what position of the lever 57 gives him the proper amount of pressure between the feed-rolls just described and sets this stop 61 accordingly, after which he has only to shove the  
 60 lever 57 down against the stop to have the teeth 60 engage the rack 59 in proper position to maintain this pressure. When the operator desires to release the paper so that  
 65 he can move it freely between the rollers 53

and the lower feed-rolls 36 and 37, he simply moves the lever 57 to a vertical position, thereby lifting the rollers 53 clear of the other rollers. As is best shown in Fig. 7, the four rollers just described are so proportioned and  
 70 mounted upon their respective shafts that the line of contact of the upper and lower rollers is on a level with paper 28 upon the table 17, the rollers being mounted in slots or open spaces 65, cut in the surface of the table  
 75 17, as shown.

At the front of the table 17 is a stamp-case, whose general features are fully described and claimed in our prior patent, No. 725,054. This consists of two upright plates 70 and 71, 80 secured to the table at their ends by any suitable means, there being, however, spaces 73 and 74 between these plates and the table through which the paper 28 may freely pass. At one side of the machine the ends of these  
 85 case sides 70 and 71 are secured together in parallel position by a permanent bar 76, fastened in position by screws 77 or other suitable means. The other ends of the parts 70 and 71 are detachably secured together in  
 90 parallel position by a locking-bar 79, having on one end a head 80 and a reduced portion 81, adapted to fit in a notch in the end of the part 71, as shown, the head 80 bearing on the outside of the plate 71, while the shoulder 82  
 95 bears on the inside of the plate 71. Similarly, at the other end of the connecting-bar 79 there is a shoulder 83 bearing against the inside of the plate 70 forming the side of the stamp-case, and there is a reduced threaded  
 100 portion 84, on which a thumb-nut 85 is adapted to turn, the same bearing against the outside of the plate 70, as shown in Fig. 3, to force it up against the shoulder 83. By tightening this thumb-nut 85 with the parts in the  
 105 position of Fig. 3 the sides 70 and 71 of the stamp-case are rigidly held in parallel position, as shown, and by loosening the thumb-nut 85 the bar 79 may be entirely removed from the stamp-case. This bar 79 is located,  
 110 as shown, near the top of the case, so that it prevents the removal of the printing mechanism, which, as illustrated in our prior Patent, No. 725,054, and as will be hereinafter described, is mounted within the stamp-case. 115  
 By removing the bar 79 said stamping mechanism may be removed from the stamp-case.

Cut in each side 70 and 71 of the stamp-case near the top is a track 90, on which rollers 91 are adapted to travel backward and  
 120 forward from one end of the stamp-case to the other. These rollers or wheels 91 are mounted upon and adapted to carry the stamp-carriage 92. Rising from this carriage 92 is a tube 93, in which the stamp-handle 94 is adapted to be moved up and down. 125  
 This stamp-handle 94 passes through the stamp-carriage 92 and engages and operates the stamp mechanism 95. The stamp mechanism here shown is the subject of an inde- 130



pendent application filed herewith, Serial No. 251,123, and is consequently not described in detail. The stamp mechanism of our prior patent, No. 725,054, may be used in place of the mechanism hereshown. Whatever mechanism is used for stamping purposes should be so constructed that when the operator depresses the handle 94 the stamp will print upon the portion of the paper 28 which is directly below the stamp-carriage 92 inside the stamp-case.

Extending from the stamp-carriage 92 below the rollers 91 are pins 97, adapted to normally travel backward and forward in a horizontal track 98 in the stamp-case below the track 90 heretofore described. In order to allow the stamping mechanism 95 to travel across the table 17 and print upon the paper 28 tickets at two or more predetermined positions upon the paper, we provide a cam-track which is an improvement in some details upon that described and claimed in our prior patent above referred to. It consists in a vertical downwardly-extending track 100 from the horizontal track 98 to the point on the paper inside the case at which it is desired the stamp shall make its first impression; then a diagonal track 101, extending upward to the dotted-line position 102, Fig. 1, where the stamp is above the second desired printing position; then downward in another vertical track 103 to the second printing position; then diagonally upward in another track 104 to the dotted-line position 105, where the stamp is above the third printing position; then downward in the vertical track 106 to the third printing position; then diagonally upward in the track 107 and through the vertical passage-way 108 back into the horizontal track 98. Attention is called to the fact that the cam-track does not at the points 102 and 105 open directly into the track 98, from which it follows, as is more fully described and claimed in our prior patent, that when the stamp is moved to the position shown in Fig. 1 and the handle 94 is depressed the pins 97 will, if proper switching mechanism in the cams is provided, travel downward in the track 100 to the point where the stamp makes its first impression, thence upward in the track 101 to position 102, then on a second depression of the handle down the path 103 to the position where the stamp makes its second impression upon the paper, thence on release up the path 104 to position 105, thence on a third depression down the path or track 106 to the point where the stamp makes its third impression, thence upward on release through the path 107 back into the track 98 along which the pin 97 is adapted to travel as the stamp is moved backward on track 90 to the first position of starting. Our invention in this part of the mechanism over the devices of our prior patent above referred to consists in the

switching mechanism. In order to cause proper switching of the stamp from the track 100, 103, and 106 into the respective inclined tracks, we attach by screws 110 or other suitable means the spring-plates 111 on the outside of the sides of the stamp-case. These spring-plates, as shown in Fig. 1, lie just inside the outer edges of the cam-tracks 100, 103, and 106 and are prevented from springing farther into those tracks by the projecting ears 112 on the sides of the springs, which engage the sides of the tracks, as shown. Secured to the inside of these springs 111 and lying wholly within the tracks referred to are triangular pieces 113, having their points at the top of the springs and their broad bases occupying substantially the width of the tracks in which they are placed, so that when the stamp is depressed in the manner heretofore described in any of the vertical tracks the pins 97 bear against first the upper portions of these triangular members 113 and as the stamp is depressed slip down the faces 114 of the triangles, thereby forcing the switches outward from their tracks, (to the right and left of the center lines of the case in Fig. 7,) so that the pins 97 pass them before reaching the printing positions. As soon as the pins 97 pass off from the faces 114 the springs 111 throw the triangular members 113 back into the vertical tracks, and when the stamp is released the pins 97 instead of traveling up the vertical tracks from which they came travel along the curved faces 115 at the bottoms of these triangles 113 up into the proper diagonal tracks, and the switching is thus efficiently and positively effected.

Our prior patent above referred to describes a table for paper adapted to have two strips of paper pass over it and means substantially as here described for printing across those strips of paper twice upon one portion to form or make the ticket proper and the auditor's stub and once upon the second strip for the agent's record. In commercial practice we find the greatest difficulty in making these two strips of paper move at proper uniform speed for the purposes required in the machine, and one of the improvements of our present mechanism is to use a single sheet of paper, as heretofore described, to cut it lengthwise by means of the knife 43, heretofore described, so that as it passes under the stamping mechanism it is in two strips corresponding to those of our prior patent, the wider strip for the ticket and auditor's check being perforated lengthwise as it passes over the wheel 41, heretofore described, and to then cut off the ticket and auditor's check from its strip of paper, while leaving the agent's portion 120 intact. In order to cut off the ticket and auditor's check, as thus described, we provide upon the front of the machine a pair of shears consisting of a stationary jaw 121 above the space 74 in the front



of the machine, through which the paper is adapted to pass, as heretofore described, and a movable jaw or cutting-knife 123, pivoted at 124. As shown, the stationary jaw 121 and the cutting portion of the knife 123 only extend sufficiently far across the machine to cut off the ticket proper and auditor's check without cutting into the agent's record 120. The outer swinging end of the shear-knife 123 passes under a guide-plate 125 on the front of the machine and is bent upward in the right-angle portion 126, having extending from it a handle 127, adapted to be grasped by the operator. The shear-knife 123 is in normal position when horizontal and in contact with stationary blade 121, as shown in Fig. 1. It is moved by the operator to the dotted-line position of Fig. 1 to allow the paper to pass through it and is then lifted and closed by the operator to cut off the paper containing the ticket and auditor's check.

On the back of the handle 127 is a lug 130, to which is pivotally connected at 131 a link 132. The opposite end of this link 132 is pivotally and adjustably connected by a screw 133 in one of several holes 134 in the end of a lever 135. This lever 135 is loosely mounted upon a shaft or stud 136, mounted in one side frame 16 of the machine, and is located adjacent to the feed-roll shaft 34, heretofore described. Pivotally mounted upon this lever 135 at 137 is a pawl 138, held by a spring 139 in contact with a ratchet wheel 140, which is also mounted upon the shaft 136 and is in rigid connection with a gear-wheel 141. Meshing with this gear-wheel 141 is a pinion 142, suitably mounted upon a screw or stud 143 on the end frame 16. This pinion 142 also meshes with another pinion 145, mounted upon the shaft 34, carrying the feed-rolls. When the operator depresses the knife 123, heretofore described, he thereby depresses link 132 and lever 135, thereby causing pawl 138 to engage the teeth of ratchet-wheel 140 and rotate the wheel 141 counter-clockwise in Fig. 3. This rotation of wheel 141 counter-clockwise rotates pinion 142 clockwise, which in turn rotates pinion 145 counter-clockwise in Fig. 3. This rotation of the pinion 145 rotates the shaft 34 and moves the paper upon the table across the table to the left in Fig. 3 through the stamp-case and through the opening and open shears. The parts are so proportioned that while moving the shear-knife from the full-line position of Fig. 1 to the dotted-line position of the same figure the feed-roller moves all the paper upon the table out from under the stamp a sufficient distance so that the ticket which has been previously printed in the manner heretofore described so that that portion of the paper which was in the stamp-case is now outside of the stamp-case in front of the machine, as shown in Fig. 1, and the ticket and auditor's portion of the

paper is between the stationary jaw 121 and the open jaw 123 of the shears. The operator now takes hold of the handle 127 and closes the shears or moves the swinging jaw 123 from the dotted-line position to the full-line position of Fig. 1, thereby cutting off the ticket and auditor's check from the paper of which it has previously been a part.

In order to allow for temporary adjustment of the paper upon the table backward or forward without moving the shears or with reference to them, we mount the pinion 145, heretofore described, on a spline 150, key, or other equivalent mechanism on the shaft 34, so that by taking hold of a milled handle or hub 151 the pinion 145 can be moved out of mesh with the pinion 142, this against the action of the spring 153 bearing against the head or washer 154, as shown in Fig. 4. When the pinion 145 has thus been moved to the left in Fig. 4 and to the right in Fig. 2 out of mesh with the pinion 142, the operator can, by holding the handle 151, turn the shaft 34 and the feed mechanism upon it in either direction to move the paper upon the table for adjustment without its being necessary to move any of the other parts of the device.

In the general operation of the machine it is placed in the office of a local ticket agent with slugs for printing different dates and different stations along the railroad to be inserted in the stamp, as required, as more fully appears in our prior patent above referred to and the copending application. The agent threads the paper through the machine, as shown and described, in which condition it is ready for use. When he is required to sell a ticket for a particular station, he puts the slug for that station in the stamp, moving the stamp for that purpose to the right-hand end of the stamp-case of Fig. 1 or, if desired, removing the bar 79, heretofore described, and taking the stamp wholly out of the case. The operator now moves the stamp-handle with the stamp upon it to the position shown in Fig. 1 and depresses the handle, thereby printing at the point on the paper in the stamp-case below the track 100, thus making the ticket. He now allows the stamp to travel under the action of springs in the stamp mechanism to the position 102 and depresses the handle in track 103 to print the auditor's check. He again releases the stamp, and it travels to position 105, from which he depresses it in track 106 to print the agent's record. He now releases it, and the stamp travels up track 107 to the point from which it started in contact with the bar 79, where the agent can change the printing-slug or move the stamp back to the position shown in Fig. 1 ready to print another ticket for the same destination. The ticket being thus printed, the operator takes hold of the handle 127 and depresses it, thereby opening the



shear-jaws, as described, and feeding the printed ticket along between the shear-jaws, as heretofore described. The operator now raises the handle 126 and cuts off the paper containing the ticket and auditor's check. Such ticket and auditor's check having been perforated in the line 160 in its course through the machine, the operator tears the two portions apart, gives one to the purchaser and sends the other in due course to the auditor of the road. The portion of the paper which was printed having thus been moved along in the machine and cut off a fresh portion of paper is now inside the stamp-case under the stamp ready to be printed into a new ticket. If the operator desires to adjust the tension of the paper, he does so by varying the position of the lever 57 in the manner heretofore described.

We do not wish to be limited to exact details of construction, which may be varied within reasonable limits without departing from our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In mechanism of the class described, the combination of a support adapted to have paper moved over it, a paper-cutting knife mounted adjacent to said support, and mechanism operated by the movement of the knife for advancing the paper along the support to the knife.

2. In mechanism of the class described, the combination of a support for the paper, adapted to have the paper moved over it, a paper-cutting knife mounted adjacent to the support, and mechanism operated by the movement of the knife for advancing the paper along the support to the knife, and a handle connected to the knife adapted to be taken hold of by the operator.

3. In mechanism of the class described, the combination of a table, a pair of shears mounted with the opening between the jaws of the shears in a position to receive paper from the table, and a paper-feed mechanism for moving paper along the table through the shears adapted to be operated by the movement of one moving shearing knife or blade of the shears as the shears are opened, and adapted to allow the paper to remain at rest when the shearing blade or knife is moved in the opposite direction to cut the paper.

4. In mechanism of the class described, the combination of a table, a pair of shears mounted with the opening between the jaws of the shears in a position to receive paper from the table, and a paper-feed mechanism for moving paper along the table through the shears adapted to be operated by the movement of one moving shearing knife or blade of the shears as the shears are opened, and adapted to allow the paper to remain at rest when the shearing blade or knife is moved in

the opposite direction to cut the paper, and a handle on the shear blade or knife connected to the operating mechanism adapted to be grasped by the operator to move it as described.

5. In mechanism of the class described, the combination of a table adapted to have paper move over it, a paper-cutting knife mounted adjacent to the table adapted to cut off paper as it comes from the table, a feed-roller adjacent to the table adapted to move the paper along the table, a ratchet-wheel in operative connection with the feed-roller, and a lever connected with the cutting-knife having a pawl engaging the ratchet-wheel, the whole so arranged that the paper is only moved while it is being moved to the position in which it is ready to be cut off, substantially as described.

6. In mechanism of the class described, the combination of a table for the paper, a shaft adjacent to the table, a feed-roll on the shaft adapted to move paper along the table, a pinion on the shaft, another pinion suitably mounted meshing with the first pinion, a larger gear meshing with the second pinion, a ratchet-wheel in rigid connection with the last-mentioned wheel, a lever journaled on the same axis as the ratchet-wheel and gear having a pawl upon it engaging the ratchet-wheel, a cutting-knife adjacent to the table adapted to be moved by the operator to cut off paper as it comes from the table, and a connection between said knife and lever whereby moving the knife to the position where it is ready to cut off the paper operates said gearing to advance the paper along the table and whereby the paper remains at rest while the knife is moving in the opposite direction to cut off the paper.

7. In mechanism of the class described, the combination of a table for the paper, means for feeding one sheet of paper along the table, means for cutting said paper along its length, means for cutting off crosswise of the table one of said longitudinal portions of the paper without cutting the other portion, and mechanism connecting the feed and lengthwise-cutting mechanism with the crosswise-cutting mechanism, so that operating the crosswise mechanism automatically moves the other mechanisms.

8. In mechanism of the class described, a table for the paper, means for feeding one sheet of paper along the table, means for cutting said paper along its length, adjustable means for varying the pressure of the paper in contact with said feed and lengthwise-cutting mechanism, means for cutting off crosswise of the table one of said lengthwise portions of the paper without cutting the other portion of the paper, and mechanism connecting the feed and lengthwise-cutting mechanism with the crosswise-cutting mechanism whereby operating the crosswise-cut-



ting mechanism operates said feed and lengthwise-cutting mechanism.

9. In mechanism of the class described, the combination with a table having feed-rollers 5 below the table extending through slots therein to engage the paper, a shaft mounted above the table, supplemental pressure-rollers eccentrically mounted for rotation upon said upper shaft, a lever upon said shaft 10 adapted to be moved by the operator to change the position of the centers of said supplemental pressure-rollers with reference to the main feed-rollers, and a rack adapted to be engaged by said lever-handle to hold it 15 in different positions, substantially as described.

10. In mechanism of the class described, in combination with a table adapted to have the paper move over it, the lever-arms 20 pivoted to the frame of the table and resting on suitable supports 21, and the paper spool or roll 25 journaled at the ends of the supporting-levers 20, the whole being arranged to allow the paper to be supported behind the 25 table, as described, for ordinary working and to be swung up over the table for packing or storage purposes.

11. In mechanism of the class described, in combination with a table, means for feeding 30 paper along the table, a pair of shears located in the path of the paper having one jaw secured in stationary position and another jaw or knife pivoted thereto, a handle on said jaw or knife adapted to be grasped by the operator and mechanism so connecting the handle 35 with the feed-operating mechanism that opening the shears by removing the movable jaw feeds the paper through the shears and also so arranged that while the movable 40 knife of the shears is being closed the paper remains at rest.

12. In mechanism of the class described, in combination with a table, means for feeding paper along the table, a pair of shears having one jaw 121 secured in stationary position 45 and another jaw 123 pivoted thereto, said cutting jaw or knife 123 extending across the device and being adapted to travel up and down between the guide 125 and the table, said cutting-knife having an upturned portion 50 126, and a handle 127; adapted to be grasped by the operator; and mechanism so connecting the handle with the feed-operating mechanism of the machine, so that opening the shears by moving the jaw or knife 123 feeds 55 the paper through the shears and the paper remains at rest while the knife 123 is being closed upon the knife 121, all of the parts being arranged and described substantially as shown and described for the purposes set 60 forth.

13. In mechanism of the class described, the combination of a table, a shaft below the table, carrying a feed-roll adapted to move paper along the table, a pinion upon said 65 shaft adapted to rotate the shaft when worked upon by a train of gearing connecting it with a source of power, and means by which said pinion may be moved along said shaft out of mesh with said gearing whereby 70 the shaft may be rotated to adjust the position of the paper upon the table, substantially as described.

In witness whereof we have hereunto subscribed our names in the presence of two witnesses. 75

JOHN P. EASTMAN.  
TRACY F. HAWLEY.

Witnesses:

DWIGHT B. CHEEVER,  
HOWARD M. COX.