

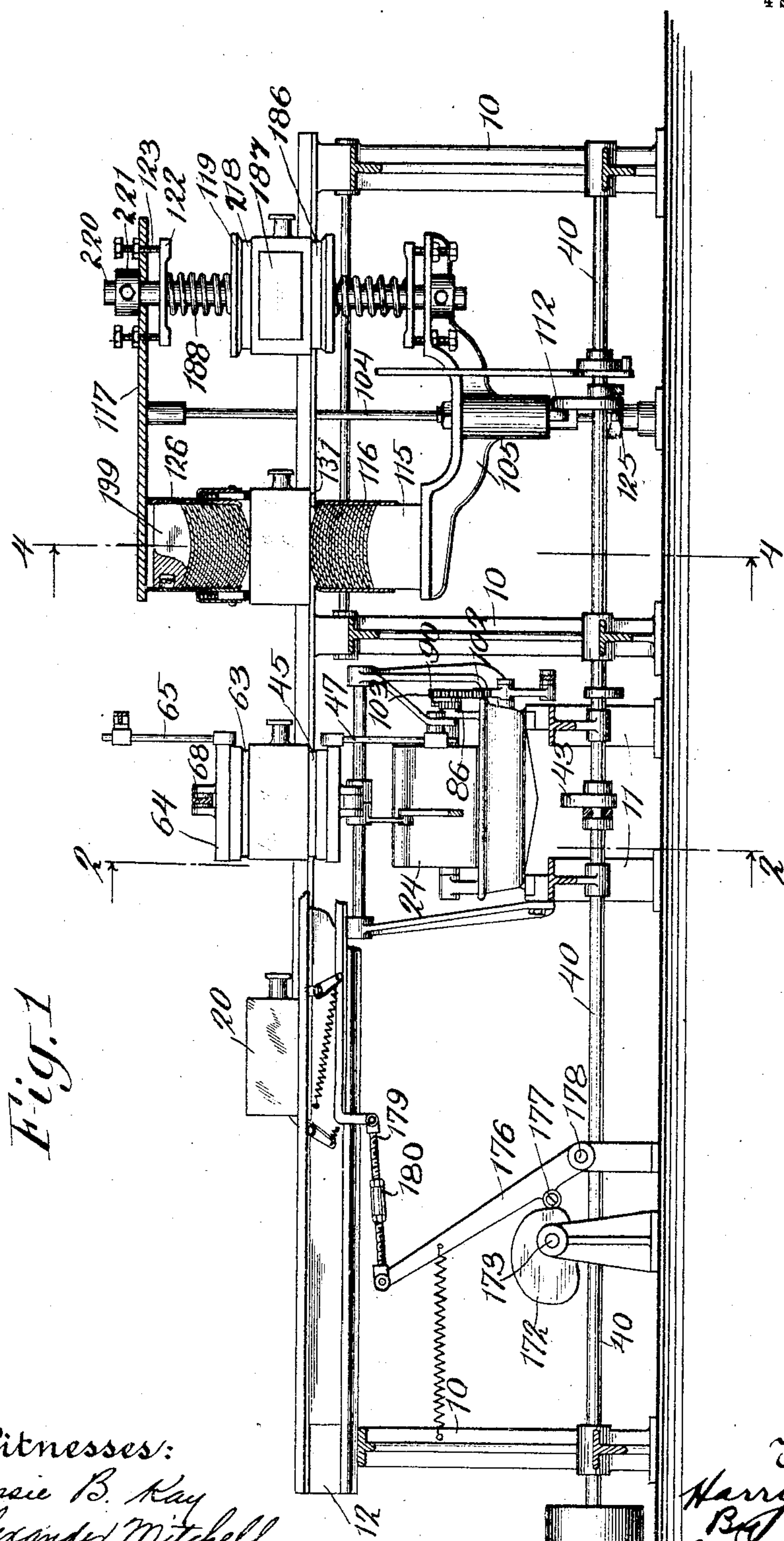
No. 779,916.

PATENTED JAN. 10, 1905.

H. L. DUNCAN.
LABELING MACHINE.

APPLICATION FILED MAR. 26, 1903.

4 SHEETS—SHEET 1.



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4 SHEETS—SHEET 2.

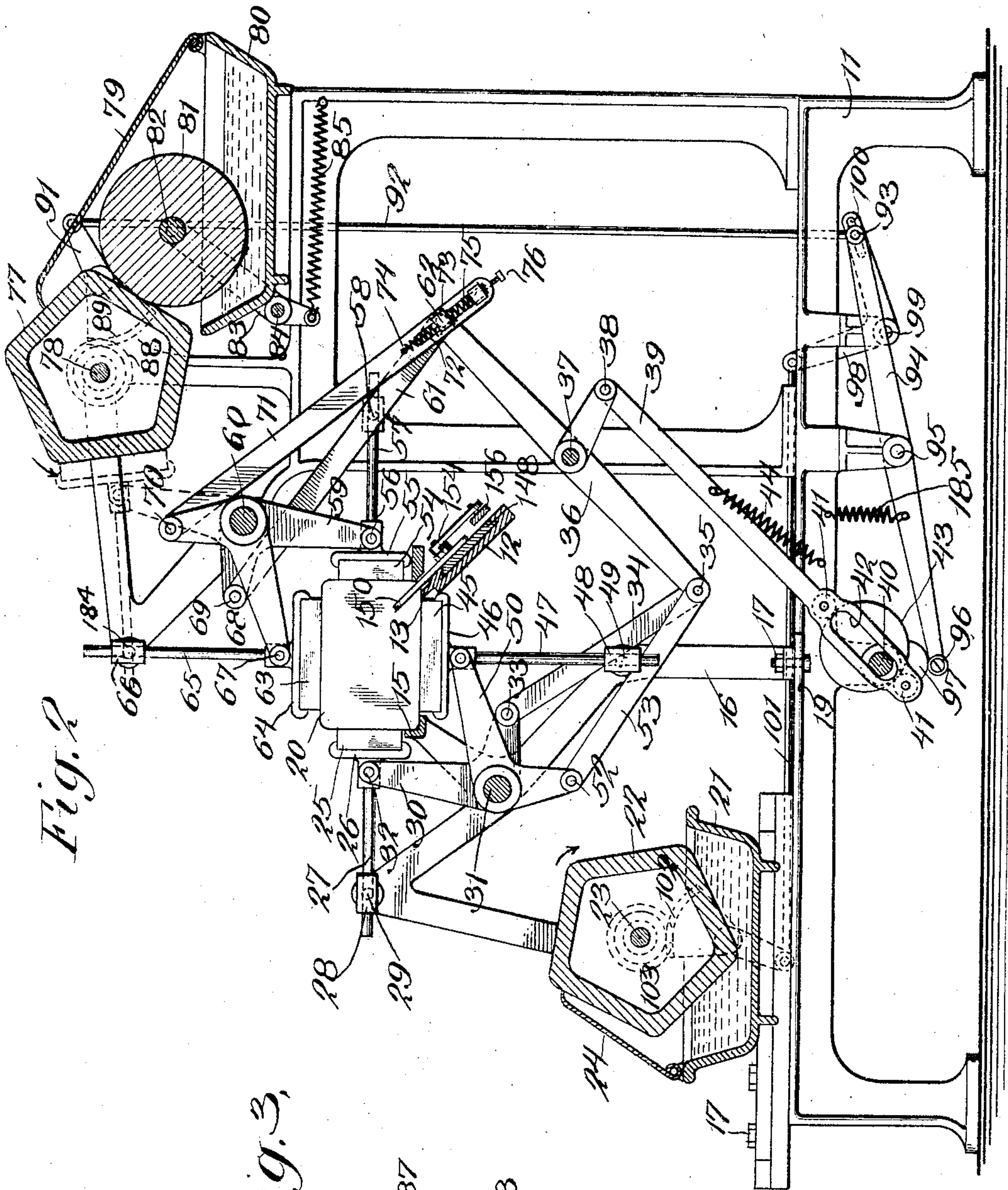
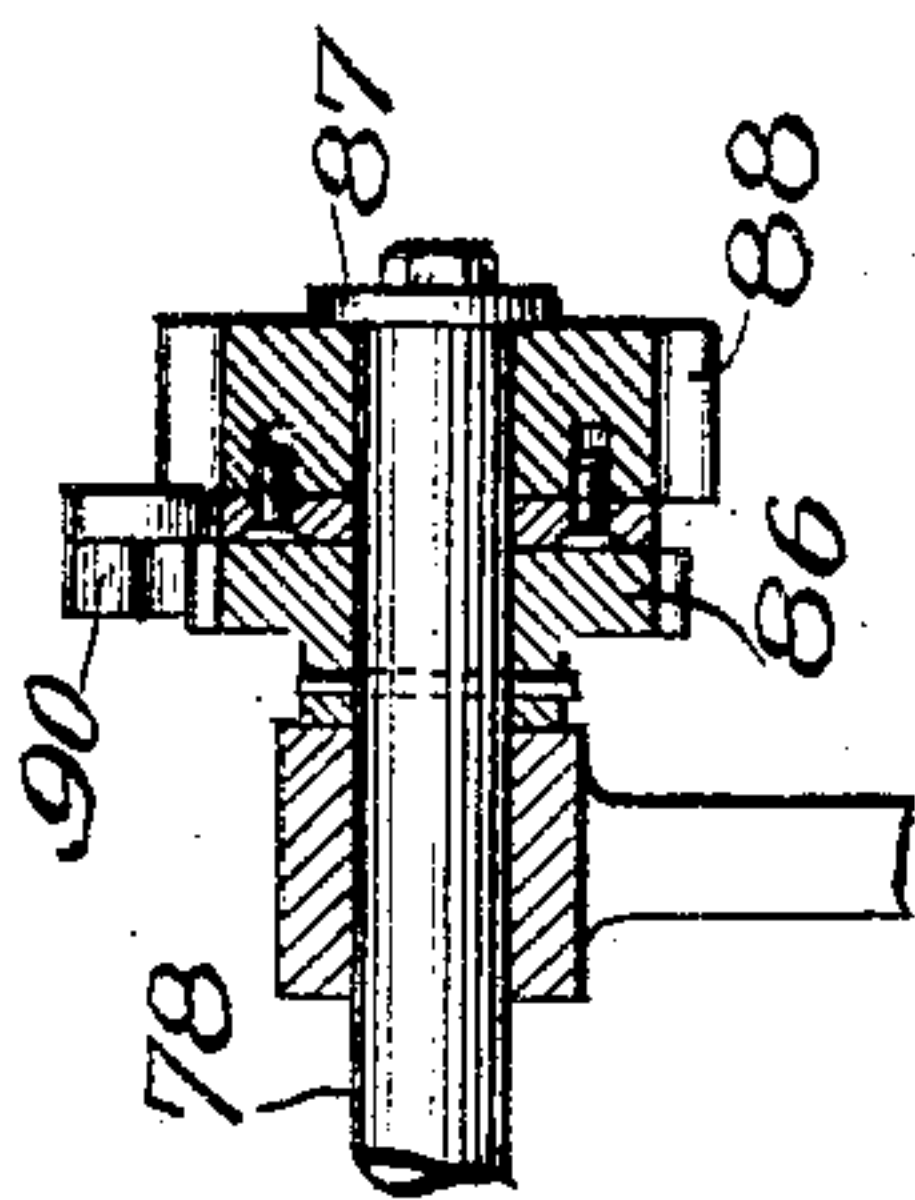


Fig. 2

Fig. 3,



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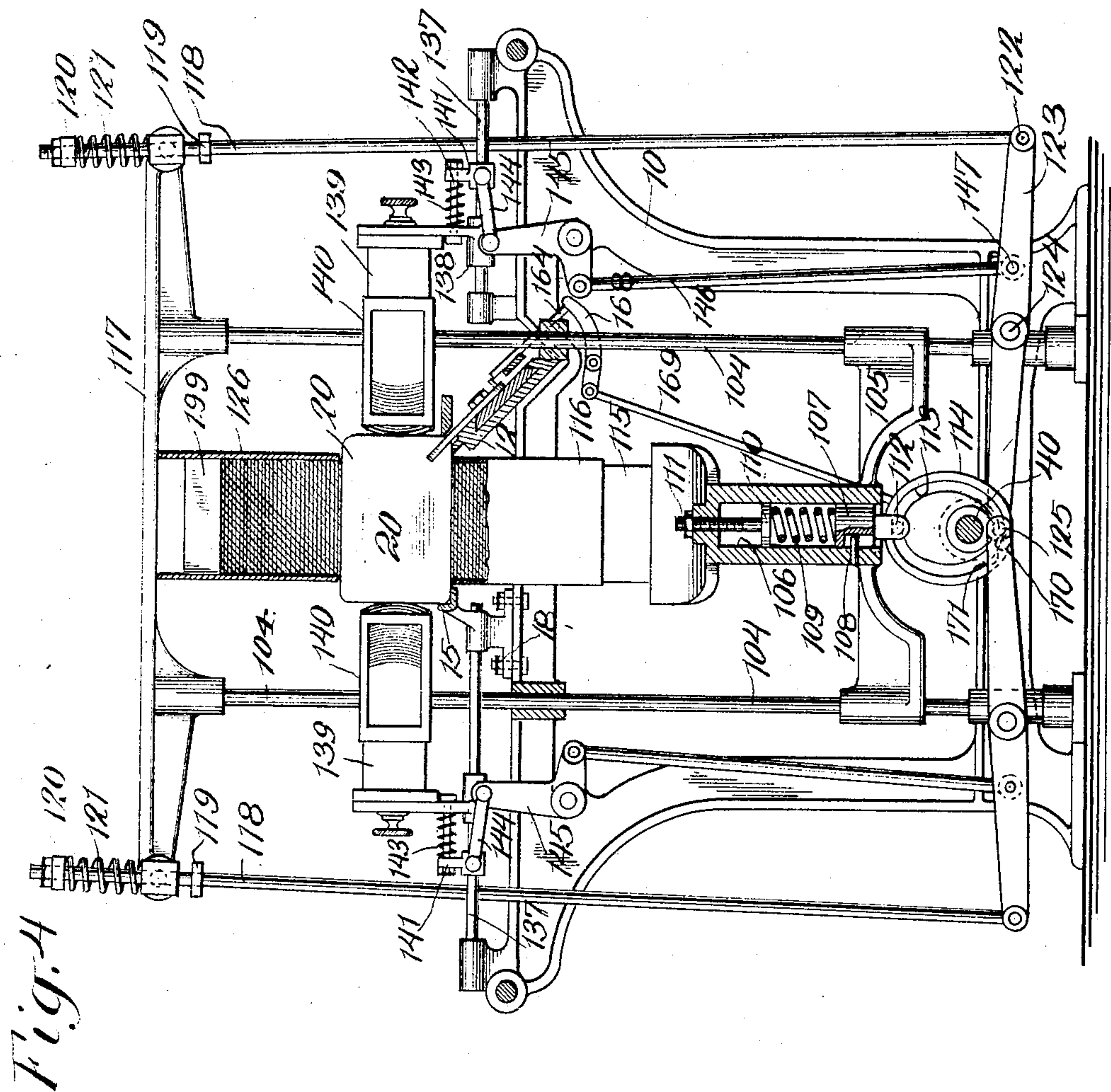
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4 SHEETS—SHEET 4.

Fig. 5

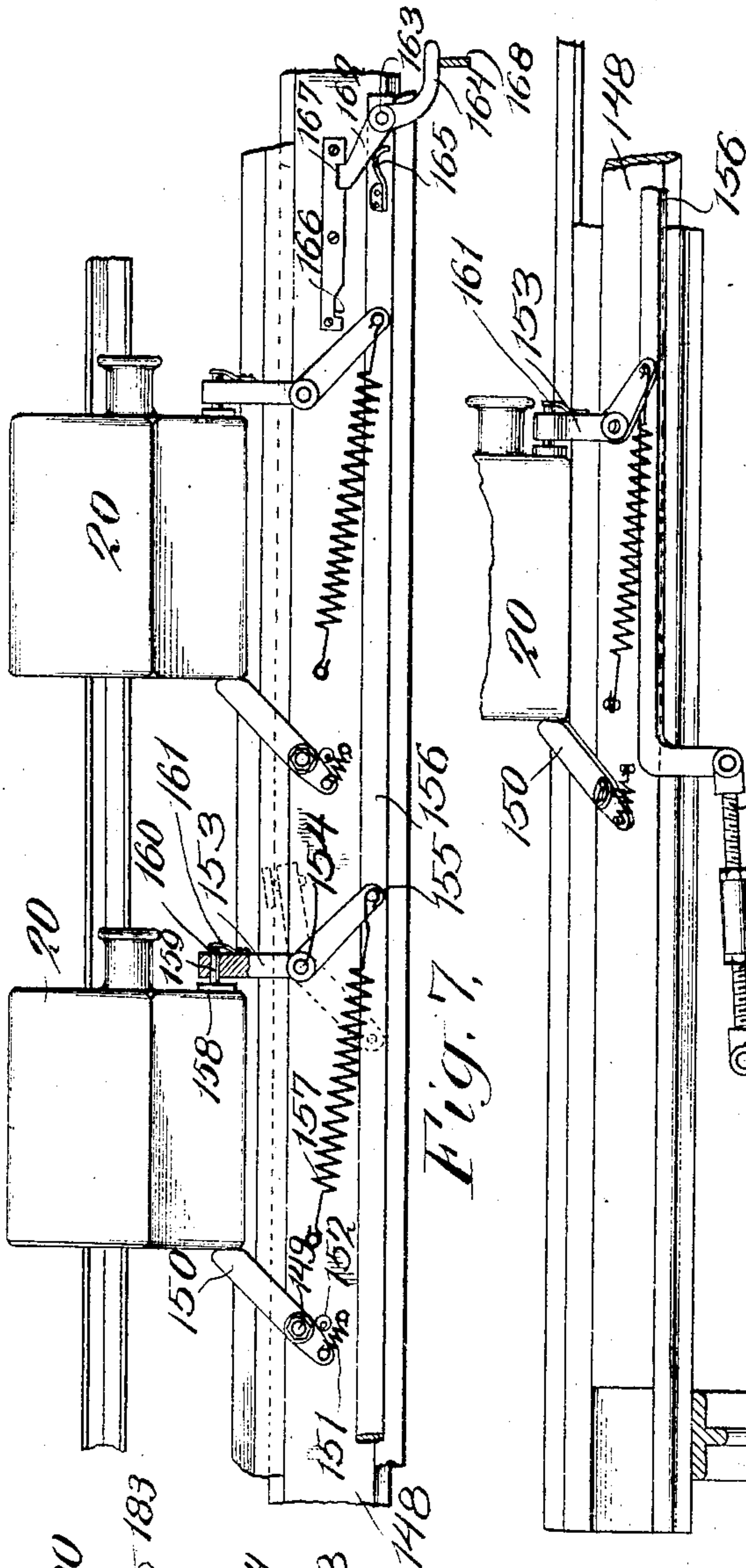


Fig. 9

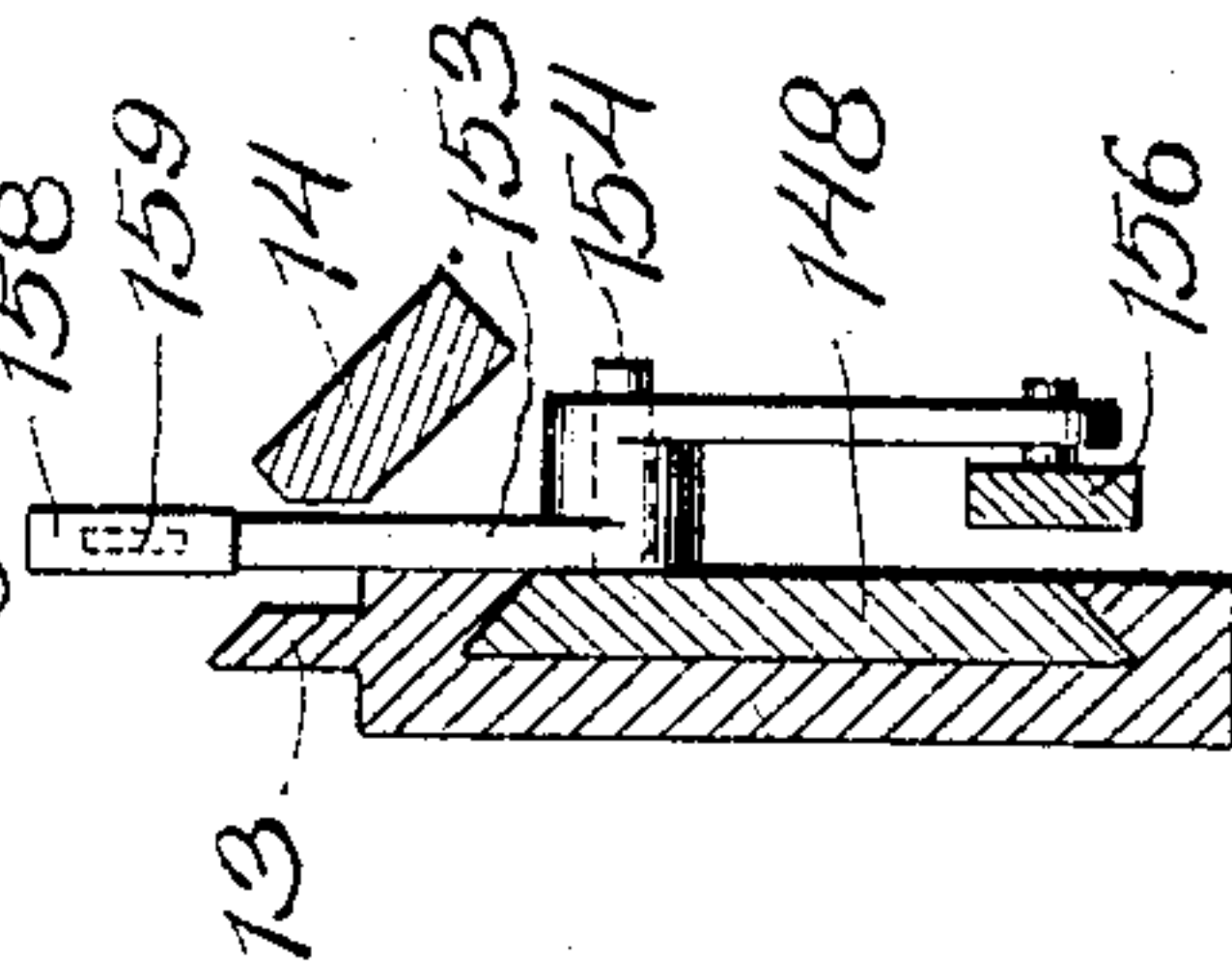


Fig. 6

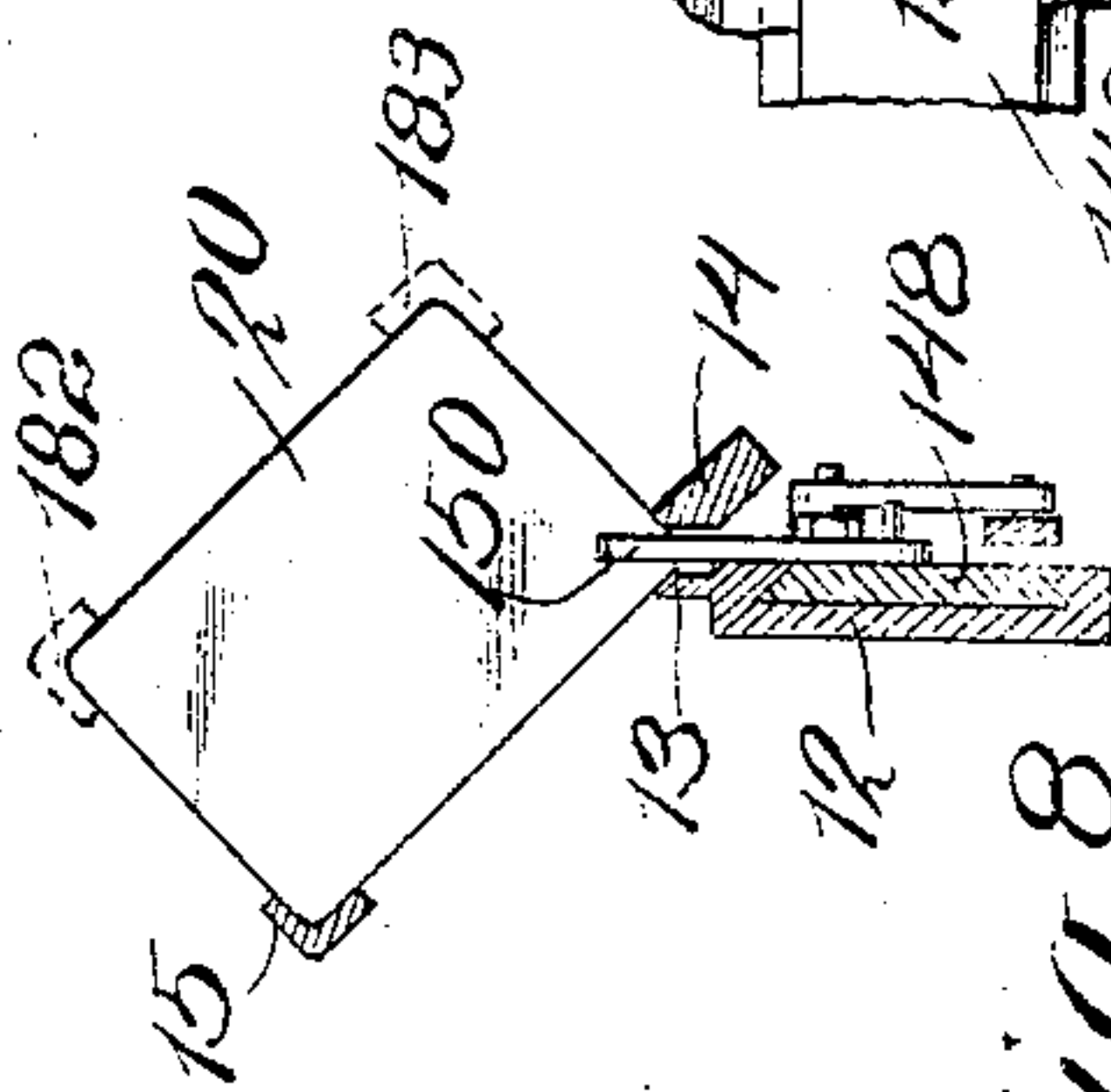


Fig. 7

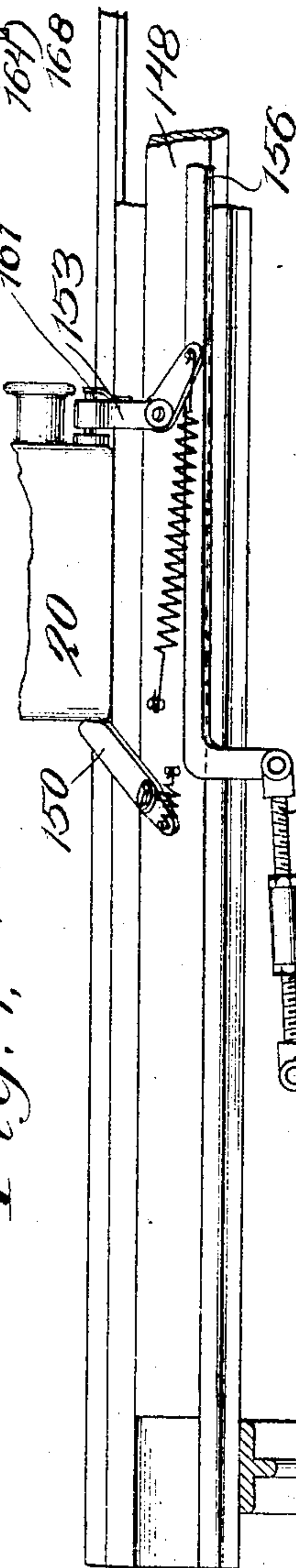
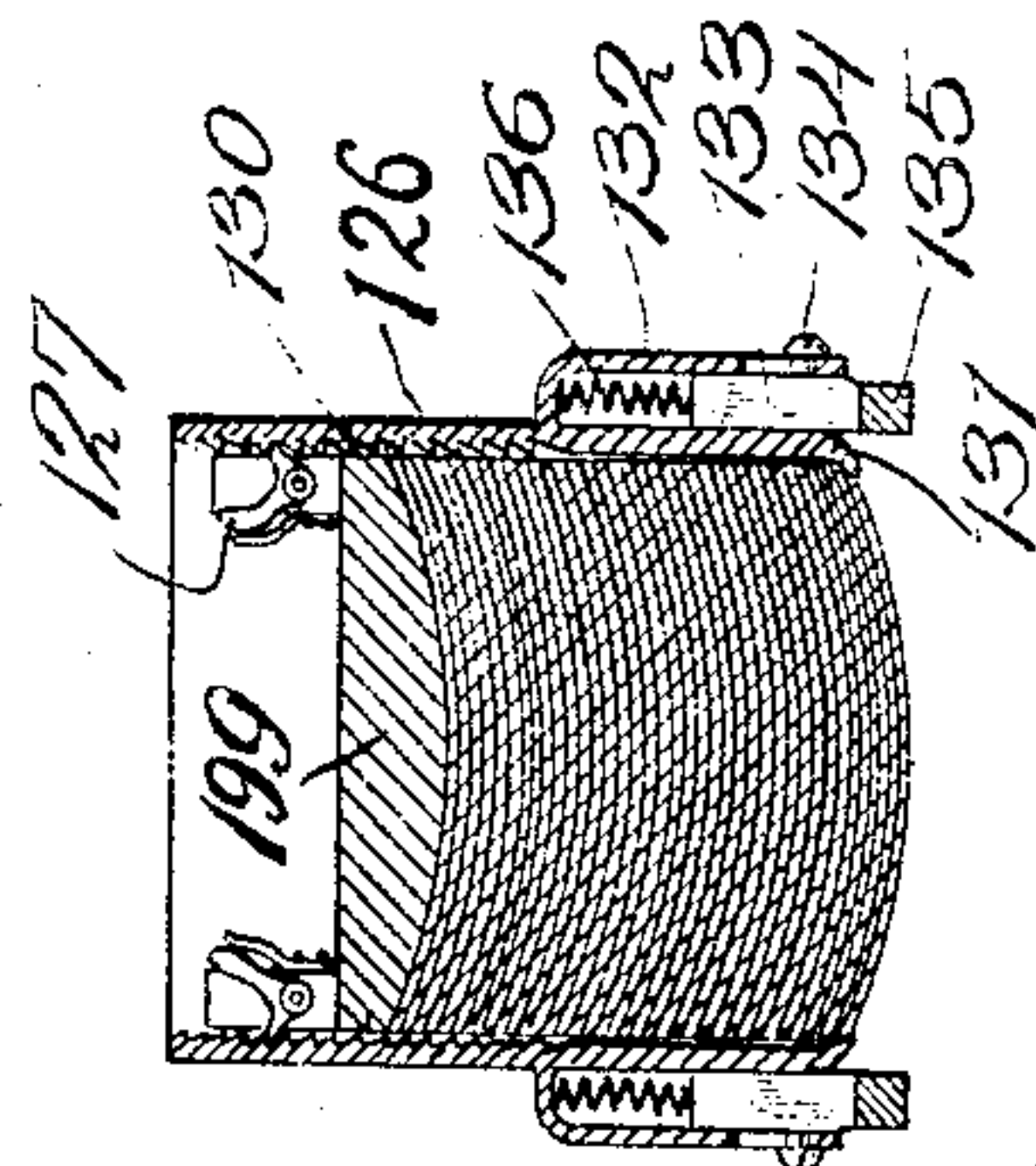


Fig. 8



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UNITED STATES PATENT OFFICE.

HARRY L. DUNCAN, OF NEW YORK, N. Y., ASSIGNOR TO NEW YORK LABELLING MACHINE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

LABELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 779,916, dated January 10, 1905.

Application filed March 26, 1903. Serial No. 149,636.

To all whom it may concern:

Be it known that I, HARRY L. DUNCAN, a citizen of the United States, and a resident of New York city, in the county of Kings and State of New York, have invented certain new and useful Improvements in Labeling-Machines, of which the following is a specification, taken in connection with the accompanying drawings.

This invention relates to labeling-machines, and it relates especially to labeling-machines comprising a runway along which a series of articles are intermittently fed and to which labels are applied by labeling devices at stations along the runway.

In the accompanying drawings, in which the same reference-numeral refers to similar parts in the several figures, Figure 1 is a longitudinal elevation of a machine embodying this invention. Fig. 2 is a transverse sectional view of the same, substantially along the line 2 2 of Fig. 1. Fig. 3 is a detail. Fig. 4 is a transverse sectional view taken substantially along the line 4 4 of Fig. 1. Figs. 5, 6, and 7 are details on a larger scale, showing the feeder. Fig. 8 is a detail sectional view showing a label-box. Fig. 9 is an enlarged detail showing a part of the feeder.

In the embodiment of this machine shown in the drawings a number of guiding members are preferably adjustably mounted to support articles and to form a runway for the same. A series of articles are intermittently fed along said runway to stations along the same, at which stations a series of labeling devices are mounted, which preferably operate in succession upon an article to apply labels thereto. At each station one of the labeling devices is preferably yieldingly operated in advanced phase with respect to the other devices at the station to engage the article and hold it firmly in position on the runway, while the other labeling devices at that station operate upon it.

A suitable framework for supporting the various operating parts of the machine is formed of the transverse frames 10 and 11, which are rigidly supported in any desired

way and are also connected by the guiding members, such as 13, 14, and 15. The additional top guiding members 182 and 183 may be employed, if desired, and may be similarly supported from the frames. The feeder for feeding the series of articles from station to station along the runway is preferably located opposite one corner of the runway and preferably engages the articles so as to feed them forward in a positive manner and at the same time leave substantially all the faces at the sides of the articles free for labeling. In the drawings the labeling is accomplished successively at a number of stations. At a first station there are located the pasters, at a second label-boxes, and at a third pressers to smooth the labels which have been applied to the pasted surfaces of the articles.

A form of paste apparatus which may be employed is shown in Fig. 2, the article 20 being indicated as supported upon the runway and the paste-pads 25, 45, 54, and 63 being indicated as engaging the article to apply paste thereto. The paste-pad 63 is preferably composed of rubber or yielding material and mounted in the pad-support 64, which is preferably rigidly connected with the pad-stem 65, which passes loosely through the sleeve 66, swiveling about the pivot 184. The pad is rotated by the paste-arm 68, connected to the pad-support by the pin 67, this paste-arm being rotated about the stud 60 by the link 71, connected to the pivot 70 in the arm. When this arm rotates, the stem slides through the swiveling sleeve 66, and thereby oscillates the paste-pad during its rotation, so as to bring it into engagement with the face of the polygonal paste-drum 77, as indicated in dotted lines. This paste-drum mounted to revolve about the shaft 78 may be intermittently rotated by any desired mechanism and brought into alinement after rotation for cooperation with the paste-pads. This paste-drum is uniformly supplied with paste from the paste-reservoir 80 by any means, such as the paste-roll 81, mounted upon the shaft 82, which is carried by the oscillating arms 83. These arms mounted upon the rock-shaft 84

are actuated by the spring 85 to normally press the paste-roll into engagement with the paste-drum, so that this roll dipping into the paste in the reservoir, as indicated, supplies
 5 paste continuously to the drum. A scraper 79, spring-pressed, if desired, may be used upon the paste-drum to secure a more uniform distribution of paste thereon. The ratchet 86, Fig. 3, may be used to intermittently rotate
 10 the paste-drum, this ratchet being engaged by the pawl 90, carried by the pinion 88, loosely mounted on the drum-shaft 78 and secured in position by the washer 87. The pinion 88 is engaged by the toothed sector 89, as
 15 is seen in Fig. 2, this sector being given an oscillation at the required intervals by the arm 91, and in this way the paste-drum is intermittently rotated to present two new faces for the action of the paste-pad, the pawl, as
 20 is well known, slipping over the ratchet when moving in one direction and engaging when moving in the other direction. The paste-pad 54 is in like manner mounted in the support 55, preferably rigid with the stem 57, which
 25 passes through the swiveling sleeve 58. This pad is rotated by the pad-arm 59, carrying the pivot 56, the arm being connected by the pin 69 with the link 61. This link is pivoted to the rock-lever 36 by the pin 62, while the
 30 link 71 is formed with the elongated slot 72, within which plays the block 73, so as to move longitudinally of the slot and to be acted upon by the springs 74 and 75, the action of these springs being adjustable by any desired
 35 means—such, for instance, as the screw 76, which compresses the spring 75 in an obvious manner. As the rock-shaft 36 is oscillated about the stud 37 the upper paste-pad 63 is operated in advanced phase, so that after re-
 40 ceiving paste from the drum 77 this upper retaining paste-pad is yieldingly brought into engagement with the upper side of the article 20 on the runway and holds the article firmly down upon the runway, while the other paste-
 45 pads, such as 54, which act subsequently, are brought into engagement with the article, the action of the springs 74 and 75 being adjusted, so as to give the proper action of the upper retaining labeling device. When these label-
 50 ing devices are withdrawn from contact with the article, the retaining labeling device is withdrawn last, since the play of the yielding connection by which it is operated must be taken up before the labeling device is with-
 55 drawn from contact with the article, it maintaining a yielding clamping action after the other labeling devices have ceased to engage the article. Other paste-pads 25 and 45 may be employed, if desired, the pad 25 being
 60 mounted in the support 26, preferably rigidly connected with the stem 27, which passes through the sleeve 28, swiveling about the pivot 29. This pad is rotated by the paste-arm 30, connected by pivot 32 with the pad-
 65 support, the paste-arm being connected by

the pivot 33 with the link 34, pivoted by the pin 35 to the rock-arm 36. The lower paste-pad 45 is indicated as mounted in the support 46, preferably rigidly secured to the stem 47, which passes through the sleeve 48, swivel-
 70 ing about the pin 49. This pad is rotated by the pad-arm 50, connected by the pin 52 with the link 53, pivoted to the rock-arm 36. By this means the pad-arms, which are both mounted upon the stud 31, simultaneously
 75 rotate the paste-pads in opposite directions and oscillate them during their rotation.

The paste-reservoir 21 is secured to the support 16, which, as indicated, carries the stud 31 and the guiding member 15. This sup-
 80 port is laterally movable upon the frame 11 and may be rigidly secured in any desired position by the bolts 17, which engage suitable slots, such as 19, in the frame. In this way the guiding member 15, together with
 85 all the paste apparatus on that side of the runway, is laterally adjustable to accommodate different sizes of articles. Within the paste-reservoir the paste-drum 22 operates, this drum being rotatably mounted about the
 90 shaft 23. This drum dips into the paste in the reservoir and the surplus paste is removed by the scraper 24, which may be spring-pressed, if desired. This paste-drum is in-
 95 termittently rotated and held in position by any desired means, such as the gearing 102 and 103, this gearing being operated by the rod 101, pivoted to the rock-lever 98, which is rotated about the pivot 99, the other end
 100 of this rock-lever being formed with a slot 100, in which the pin 93 plays, this pin serving also to connect the rod 92 with the lever 94, so as to simultaneously rotate the two
 105 paste-drums indicated. The lever 94 rotates about the stud 95, and the roll 96 upon the end of this lever is held in engagement with the cam 97 on the main shaft 40 of the machine by the spring 185. The rock-lever 36, which operates the paste-pads, as has been
 110 described, is connected by the pin 38 with the link 39, this link being formed with the slot 42, by which it is guided with respect to the power-shaft 40, and being also provided with the rolls 41, which reciprocate it in connection with the spring 44. By this mechanism,
 115 as will be readily understood, all the paste-pads are actuated so that at each revolution of the main shaft they take a supply of paste from the freshly-pasted sides of the paste-drums and apply the same to the article 20
 120 at the pasting-station on the runway, the upper retaining paste-pad being actuated in advanced phase to clamp the article down upon the runway and hold it firmly during the entire time that the other paste-pads are
 125 in engagement with the article.

Fig. 4 indicates the label-boxes which are located at the succeeding station along the runway, as is seen in Fig. 1, so as to apply
 130 labels to the pasted faces of the articles. The

lower label-box 116, formed with the retaining-ribs, as indicated, is carried by the plunger 115, which preferably has the upwardly-curved face shown in Fig. 1. This plunger
 5 may be secured upon the label-support 105, which is mounted to reciprocate vertically and is properly guided by any means, such as the vertical guide-rods 104. This label-support is preferably yieldingly operated, and
 10 the required movement may be given to it by the cam 114 on the main shaft 40, this cam being shown as provided with the closed cam-groove 113, in which the follower 112 operates. This follower is secured upon the
 15 plunger 107, retained within the hole 106 in the support by the pin 108, its upper side being engaged by the spring 109. This spring is preferably adjustable, and the stop 110 may be employed for this purpose, this stop hav-
 20 ing screw engagement with the support and being locked in position by the nut 111. In this way the label-support is yieldingly reciprocated to carry the upper label in the box into contact with the pasted article on the
 25 runway, so as to apply a label thereto in a well-known manner at each rotation of the main shaft of the machine. The upper label-box 126 is preferably rigidly secured to the label-support 117, which may also be guided
 30 by the guide-rods 104 during its movement. This label-box, as indicated in Fig. 8, is preferably formed with the retaining-lips 131, and a plunger 199, preferably having a curved working face, as indicated, may be employed
 35 in this label-box to feed the labels therein. As is shown in Fig. 8, the notches 130 may be formed in the label-box, and these notches may be engaged by the spring-pressed pawls 127, which prevent the upward movement of
 40 the plunger, except when these pawls are manually withdrawn from the notches. These pawls, however, allow the unimpeded downward movement of the plunger to compensate for any withdrawal of labels from the box.
 45 The upper label-box is preferably yieldingly actuated in advanced phase with respect to the other label-boxes and is also preferably provided with grippers 133, which may have the yielding faces 135. These grippers are
 50 preferably yieldingly connected with the label-box, springs 136 being indicated for this purpose, and, as shown, the grippers are held by the guides 132, secured to the label-box, the pins 134 engaging suitable slots in these
 55 guides. These grippers serve to engage the article upon the runway to firmly hold it by their yielding action, and thus to prevent movement of the article while the other label-boxes engage it. The upper label-box may
 60 be actuated by the rods 118, (shown in Fig. 4,) which are shown as formed with the collars 119, the springs 121 being preferably employed above the label-support 117 and being adjustable by the nuts 120. These rods
 65 are reciprocated in any desired way and are

indicated as pivoted by the pins 122 to the rock-levers 123, which move about the studs 124 and are operated from the cam-grooves 113 by the followers 125. If desired, additional label-boxes may be employed to apply
 70 labels to the lateral faces of the article 20, such label-boxes being indicated as 140 and being provided with retaining means to hold the labels in position. These boxes are mount-
 75 ed upon the plungers 139 by frictional engagement or otherwise, the plungers being supported by the label-supports 138, which engage the guide-rods 137 at the side of the machine. The slides 141 may be yieldingly
 80 connected with these label-supports by the adjustable connector or bolt 142, the spring 143 giving the desired yielding connection. The slides 141 are given the desired recip-
 85 rocating movement by the links 144, pivoted thereto and pivoted to the bell-crank levers 145, these levers being pivoted to the rods 146, which are connected by the pins 147 with the rock-levers 123. In this manner
 90 it will be seen that all the label-boxes are simultaneously given a movement so that they are brought into engagement with the article and apply a label to the desired number
 95 of faces of the same once during each rotation of the main shaft. The upper label-box is, however, operated in advanced phase to act as a yielding retaining labeling device, as has been explained.

At the succeeding station, as indicated in Fig. 1, the pressers are preferably employed
 100 to smoothly apply the labels to the articles, the upper presser operating preferably in slightly-advanced phase to act as a yielding retaining labeling device and to firmly hold
 105 the article upon the runway while the other pressers operate upon it. This presser 218 may be formed of rubber, bristles, or any other desired material and may be mounted in the frame 119, this frame being supported by
 110 the rod 220, by which the presser is given the desired movement. The presser may be mounted upon the label-support, as indicated in the drawings, where the rod 220 is preferably accurately guided in the label-support
 115 117, a collar 221 on the rod limiting its downward movement in the support. The spring 188 may be used to give a yielding operation to the presser, and this spring, which is of the desired tension, may be suitably adjusted by
 120 the collar 122, which may be set by the screws 123 indicated. Other pressers, such as 186 and 187, may operate upon the other sides of the article in a similar way, and, if desired,
 125 these presser may be yieldingly mounted upon the label-supports, as is indicated, the presser 186 being mounted upon the label-support 105 by the same means which has been described for mounting the presser 118.

A feeder having any desired form and operation may be employed to intermittently
 130 feed the articles from station to station along

the runway, this feeder being preferably located opposite one corner of the articles on the runway and preferably engaging the articles by entering the runway between the supporting members 13 and 14, which may be spaced apart, as indicated in the drawings. A reciprocating feeder, such as 148, may be used, and this feeder may be mounted in the slide 12, as indicated. The feeding-pawls 150, which engage the articles, are mounted upon the feeder and may be pivoted about the pins 149, the springs 151 being indicated to project these pawls into the runway and to normally hold them against the pins 152. Suitable holding-pawls are also preferably employed and connected with the feeder. These holding-pawls, such as 153, may be pivoted by the pins 154 to the feeder, the holding-pawls being shown as provided with yielding grips 158, mounted upon the guides 159, which pass through suitable openings in the pawls and are yieldingly operated by the springs 161, suitable pins 160 limiting the forward movement of these grips.

The holding-pawls are preferably pivoted to the actuator-bar 156 by the pins 155, the springs 157 serving to normally retract these holding-pawls, which readily enter and leave the slot between the guiding members 13 and 14. (See Fig. 9.) In order to maintain the holding-pawls in engagement with the articles to accurately hold them in alinement and in proper contact with the feeding-pawls 150, the latch 162 may be employed, this latch being shown as pivoted upon the actuator-bar by pin 163 and engaged by the spring 165. This latch when in engagement with the notch 167 locks the holding-pawls against the articles in the position indicated in Fig. 5 in full lines. The trigger 168 may engage the tail 164 of the latch and withdraw it from the notch 167, under which conditions the springs 157 may retract the actuator-bar with respect to the feeder and withdraw the holding-pawls into the dotted position indicated in Fig. 5, the latch then entering the notch 166. The actuator-bar is connected with the adjustable link 179, which is also pivoted to the lever 176, this link being formed with a turnbuckle 180 for adjusting its length. This lever is rotatably mounted upon the stud 178 and carries the cam-follower 177, which is held against the cam 172 by the spring 181. The skew-gear 175 upon the power-shaft 40 engages the cooperating skew-gear 174 on the transverse shaft 173, upon which the cam 172 is rigidly secured. By this means the cam when rotated in the direction indicated gives a reciprocating movement to the actuator-rod 156, the cam being shaped to give a preliminary forward movement, which serves to bring the feeding-pawls 150 into contact with the several articles along the runway. Since the further movement of the feeder 148 is thereupon prevented because the articles are at

this time held in position by the retaining labeling devices, the actuator-bar is moved forward with respect to the feeder, and the holding-pawls are moved into the runway to grip the articles. When the articles have been gripped in this manner between the holding-pawls and the feeding-pawls, the latch 162 engages the notch 167, and the actuator-rod is thereupon locked with respect to the feeder, the parts assuming the position indicated in Figs. 5 and 7. As the cam 172 is rotated farther the feeder moves forward and carries the articles one station forward along the runway and brings them into alinement with the labeling devices at the several stations. While they are still gripped by the holding-pawls and feeding-pawls, the yielding, retaining, and labeling devices come into engagement with them and clamp them upon the runway, the other labeling devices which may be employed coming into engagement with the articles shortly thereafter. When the articles have been engaged by the retaining labeling devices, the latch may be released, and the actuator-cam 172 by its further rotation retracts the actuator-rod and the feeder, the holding-pawls being first withdrawn from the runway, as has been explained. By using this intermittently-acting gripping-feeder with intermittently-operating retaining labeling devices the articles are held in position and accurately alined at all times. Before the gripping-feeder releases the articles they are engaged by the retaining labeling devices, which firmly clamp them upon the runway until they are reengaged by the pawls on the feeder. The accurate positioning of the labels upon the articles is insured in this way, and, furthermore, the articles are not allowed to move while the labeling is taking place, the retaining labeling devices firmly clamping the articles upon the runway and holding them in position, when the other labeling devices engage them.

Those familiar with this art may make changes in the numbers, sizes, and proportions of parts of this device and may employ parts of this device without using all of the same and may use portions of this mechanism in connection with other devices without departing from the spirit of this invention or losing the advantages of the same. I do not, therefore, desire to be limited to the disclosure which has been made in this case; but what I claim as new, and what I desire to secure by Letters Patent, is set forth in the appended claims.

I claim—

1. In labeling-machines, adjustable guiding members to form a runway, a feeder to cooperate with said runway and to feed a series of articles from station to station along said runway and a plurality of labeling devices adjacent said runway to apply in successive stages labels to articles at the stations along the same,

and means to yieldingly actuate one of said labeling devices at each of said stations in advanced phase with respect to the other labeling devices to retain articles in position on said runway while the other labeling devices are engaging the same.

2. In labeling-machines, a runway, a feeder to cooperate with said runway to intermittently feed articles from station to station along the same and a plurality of labeling devices cooperating with said runway to apply in successive stages labels to articles at the several stations along the same and means to operate said feeder and said labeling devices in unison, said means yieldingly operating one of said labeling devices at each station in advanced phase with respect to the other labeling devices at such station.

3. In labeling-machines, a runway, a feeder to cooperate with said runway and to feed articles intermittently along said runway, a plurality of labeling devices adjacent said runway to apply labels to an article at a station on the same, means to operate one of said labeling devices to yieldingly engage said article in advanced phase with respect to the other labeling devices to clamp said article upon said runway and means to actuate the other labeling devices.

4. In labeling-machines, a runway, a feeder diagonally opposite one corner of said runway to cooperate therewith and to feed articles intermittently along the same and a plurality of labeling devices adjacent said runway to apply labels to both faces of said article adjacent the feeder.

5. In labeling-machines, a runway, a feeder diagonally opposite one corner of said runway and four labeling devices adjacent said runway to engage the four sides of an article fed along the same.

6. In labeling-machines, a runway, a feeder to feed articles along said runway and four labeling devices mounted adjacent said runway to apply labels to the four sides of all articles fed along said runway.

7. In labeling-machines, a runway, a feeder to grip articles and feed them along said runway, a yielding retaining labeling device to cooperate with said runway, means to actuate said feeder to grip an article, to feed the same forward and to hold it in alinement upon said runway, means to operate said labeling device to clamp said article upon said runway and means to disengage said feeder from said article while it is so held by said labeling device.

8. In labeling-machines, a runway, a feeder cooperating with said runway, to intermittently feed a series of articles along the same, a plurality of retaining labeling devices at stations along said runway and means to actuate said feeder and said labeling devices to cause said feeder to grip said articles and feed them to said stations on said runway, to cause

said labeling devices to engage said articles while gripped by said feeder and to hold them in position on said runway, to cause said feeder to disengage said articles while said articles are held by said labeling devices and to cause said feeder to grip another series of articles so held by said labeling devices.

9. In labeling-machines, a runway, a labeling device adjacent said runway, an intermittently-gripping feeder adjacent said runway and means to operate said feeder and said labeling device to feed an article along said runway by said feeder and to maintain the grip of said feeder on said article to hold the same in alinement by said feeder when said labeling device engages said article.

10. In labeling-machines, a runway, a gripping-feeder adjacent said runway to feed articles from station to station along the same, a retaining labeling device at one of said stations and means to actuate said feeder and said labeling device to cause said feeder to feed an article to said station and to hold it in alinement, to cause said labeling device to engage said article while so held by said feeder to retain the same upon said runway, and to cause said feeder to disengage and reengage said article while so held preparatory to feeding it forward along said runway.

11. In labeling-machines, a runway, an intermittently-gripping feeding device, an intermittently-operating retaining labeling device and means to actuate said devices so that one of said devices always positively holds an article fed along said runway when the other device engages or disengages the same.

12. In a labeling-machine, an intermittently-operating gripping feeding device and an intermittently-operating retaining labeling device, and means to actuate said devices to always positively engage an article to hold the same in alinement by one of said devices when the other engages or disengages the same.

13. In labeling-machines, a runway, labeling devices adjacent said runway, a feeder adjacent said runway to cooperate therewith, feeding-pawls mounted on said feeder, holding-pawls mounted on said feeder, an actuator connecting said holding-pawls, a latch to govern the relative position of said feeder and actuator and means to intermittently move said actuator to operate said holding-pawls and said feeder.

14. In labeling-machines, a runway, a reciprocating feeder adjacent said runway, spring-pressed feeding-pawls on said feeder, spring-pressed holding-pawls on said feeder, an actuator-bar connected with said holding-pawls, a latch governing the relative position of said actuator-bar and said feeder, means to reciprocate said actuator-bar and means to release said latch.

15. In a labeling-machine, a runway, a reciprocating feeder adjacent said runway, spring-pressed feeding-pawls on said feeder, spring-

pressed holding-pawls pivoted on said feeder, an actuator-bar pivoted to said holding-pawls, means to reciprocate said actuator-bar, means to maintain the relative position of said actuator-bar and said feeder during part of the movement of the same.

16. In labeling-machines, a runway, retaining labeling devices at stations along said runway, a reciprocating feeder cooperating with said runway, feeding-pawls on said feeder to be projected into said runway to engage articles, holding-pawls on said feeder, an actuator-bar connected with said holding-pawls, means to operate said labeling devices and said actuator-bar to release said holding-pawls while said labeling devices retain the articles at stations along the runway, to retract said feeder, and to grip said articles while retained by said labeling devices, to release said retaining devices from said articles, and to feed said articles forward while gripped by said feeder.

17. In labeling-machines, a runway, retaining labeling devices at stations along said runway to clamp articles upon the same at said stations, a reciprocating feeder, spring-pressed feeding-pawls on said feeder, holding-pawls on said feeder, an actuator-bar connected to said holding-pawls having spring connection with said feeder, and a latch connection between said feeder and actuator-bar.

18. In labeling-machines, a support for an article, a label-box, a yielding gripper on said label-box to engage an article and retain the same in position and another labeling device to engage said article while engaged by said gripper.

19. In labeling-machines, a runway, a label-box adjacent said runway, means to operate said label-box, a yielding gripper on said label-box to engage an article and clamp the same upon said runway and another labeling device to engage said article while the same is engaged by said gripper.

20. In labeling-machines, a plurality of labeling devices to engage the several parts of an article, means to move one of said labeling devices into contact with said article in advanced phase with respect to another labeling device to clamp said article in position while another of said labeling devices engages the same.

21. In labeling-machines, a plurality of labeling devices to engage the several parts of an article and means to move one of said labeling devices yielding into contact with said article in advanced phase with respect to the other labeling devices to clamp said article in position while the other labeling devices engage the same.

22. In labeling-machines, a plurality of labeling devices to engage the several parts of

an article, means to actuate one of said labeling devices and means to yieldingly actuate another of said labeling devices in advanced phase with respect to the first labeling device to engage an article and maintain the same in position.

23. In labeling-machines, a runway comprising a stationary guiding member, and a movable guiding member to adjust the size of said runway, a support to which said movable guiding member is secured and a labeling device mounted on said support to be adjusted simultaneously with said movable guiding member.

24. In labeling-machines, a plurality of paste-pads, a plurality of paste-arms mounted to rotate about a stud and connected with said paste-pads, links to operate said paste-arms, one of said links being formed with a slot and a yielding connection with the actuating mechanism to yieldingly actuate one of said paste-pads in advanced phase with respect to the other paste-pad.

25. In labeling-machines, an intermittently-rotating paste-drum, a plurality of rotating oscillating paste-pads, means to operate said pads to engage different angular parts of said drum to receive paste therefrom and to apply said paste to the different parts of an article.

26. In labeling-machines, a runway, labeling devices adjacent said runway, a reciprocating feeder adjacent said runway to cooperate therewith, a movable feeding-pawl mounted on said feeder, a movable holding-pawl mounted on said feeder, a spring tending to move said holding-pawl into inoperative position, a latch to maintain said holding-pawl in engagement with an article and means connected to said holding-pawl to reciprocate said feeder.

27. In labeling-machines, a runway, a feeder cooperating with said runway, a feeding-pawl on said feeder, a movable holding-pawl on said feeder, a spring tending to move said holding-pawl into inoperative position, a latch to maintain said holding-pawl in engagement with an article, means connected to said holding-pawl to operate said feeder and means to engage said article and to hold the same in position when disengaged by said feeder.

28. In labeling-machines, a feeder, a feeding-pawl on said feeder, a movable holding-pawl on said feeder, means tending to move said holding-pawl into inoperative position, a latch to maintain said holding-pawl in engagement with an article and operating means for said feeder connected to said holding-pawl.

HARRY L. DUNCAN.

Witnesses:

JESSIE B. KAY,

ALEXANDER MITCHELL.