

No. 692,055.

Patented Jan. 28, 1902.

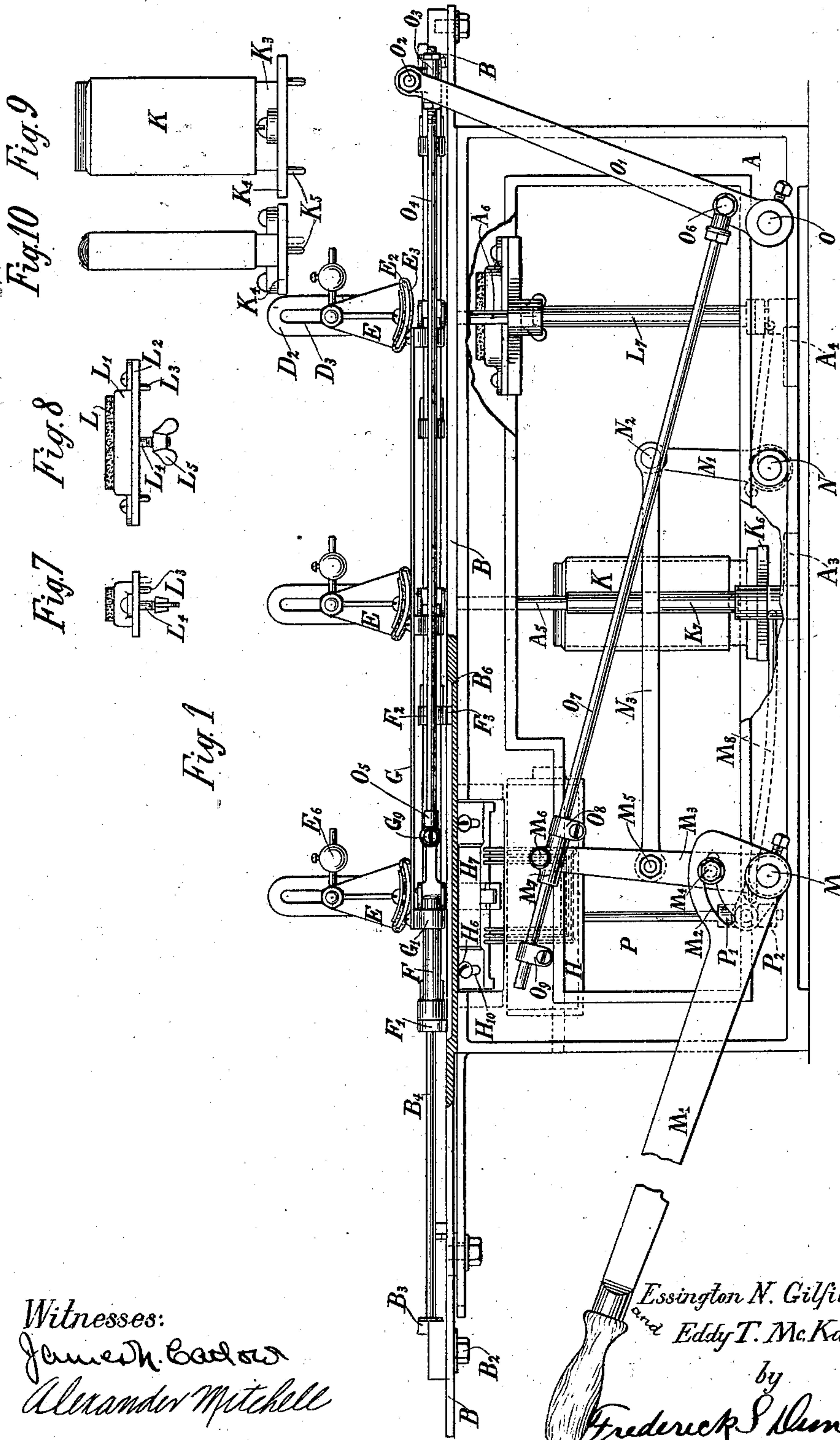
E. N. GILFILLAN & E. T. MCKAIG.

LABELING MACHINE.

(Application filed July 26, 1901.)

(No Model.)

4 Sheets—Sheet I.



Witnesses:

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Alexander Mitchell



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by

Frederick S. Duncan Att'y.

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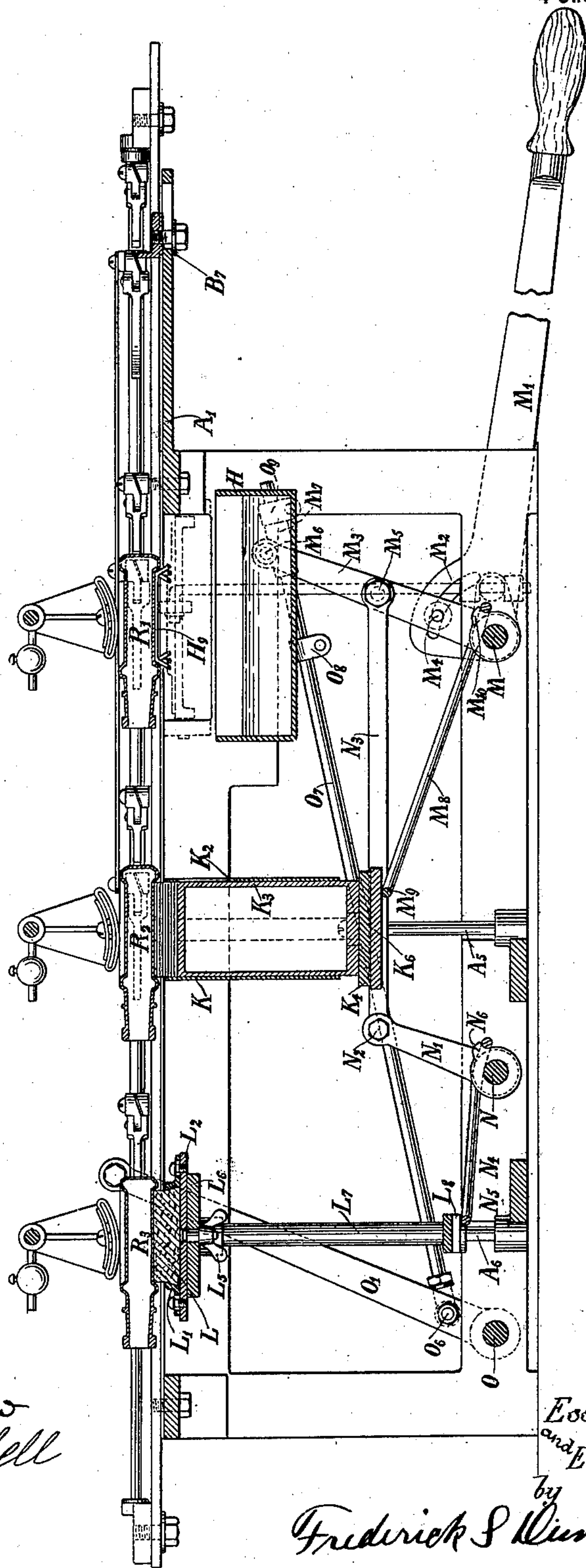
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4 Sheets—Sheet 2.

Fig. 2



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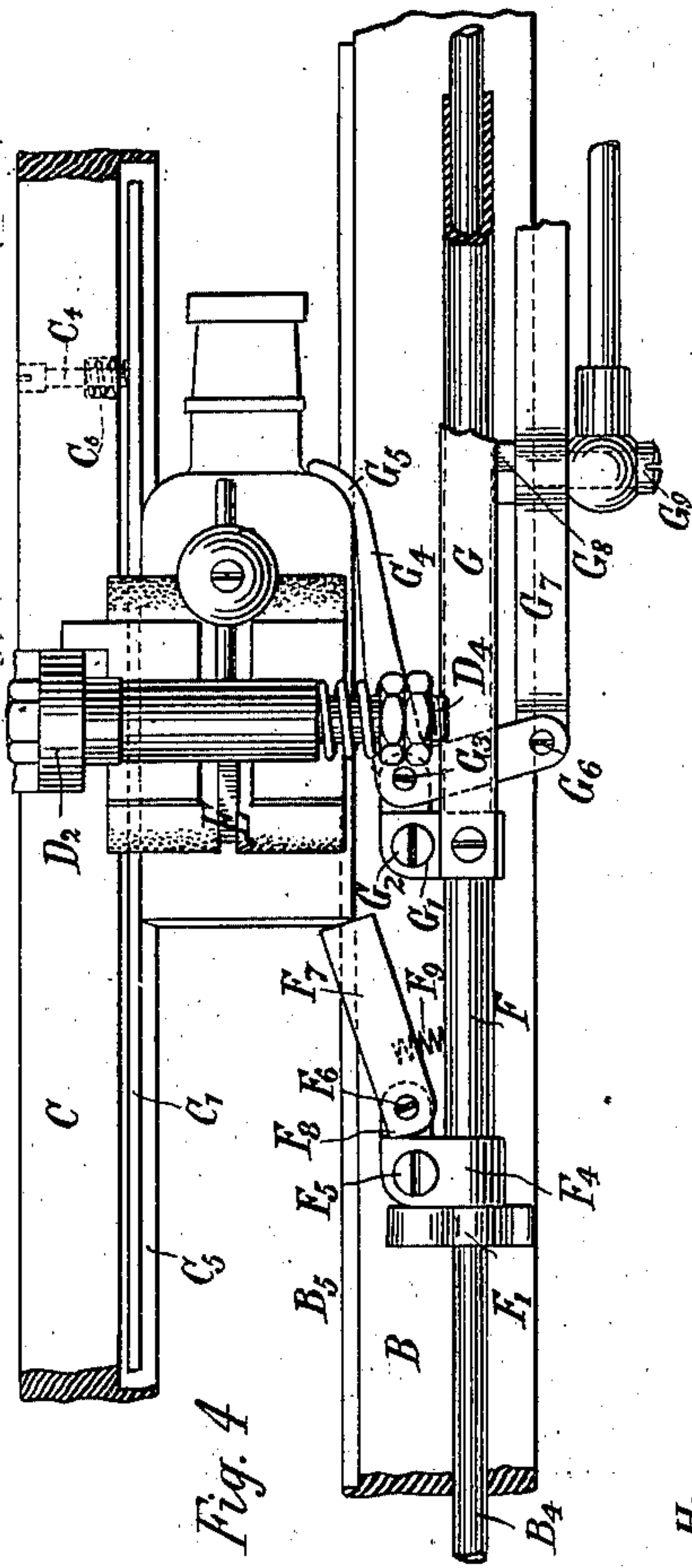


Fig. 4

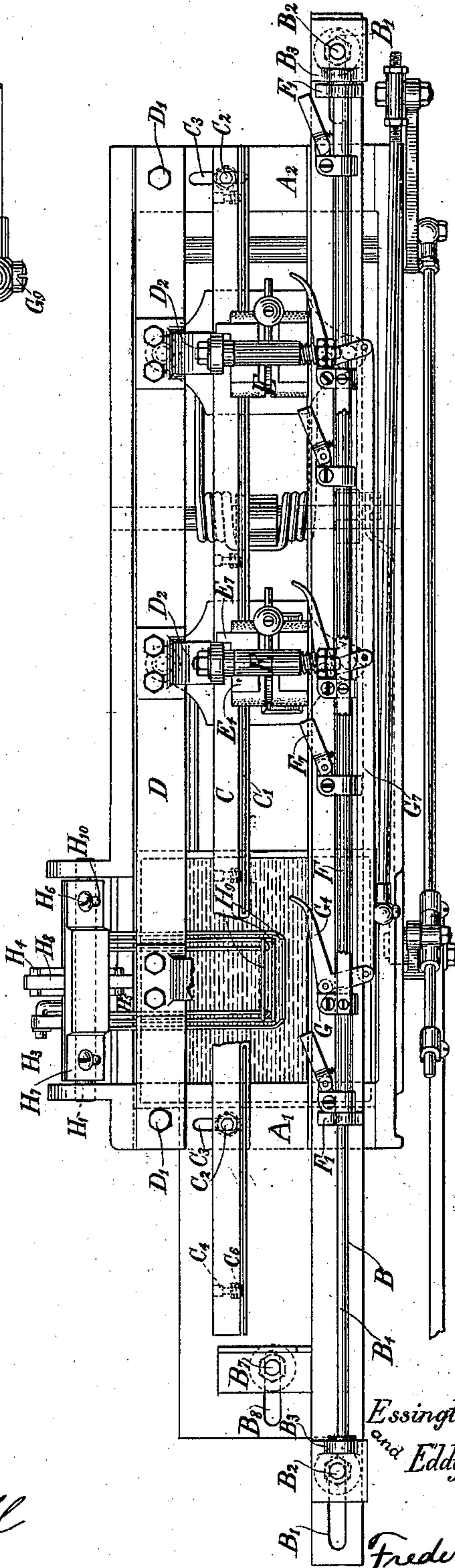


Fig. 3

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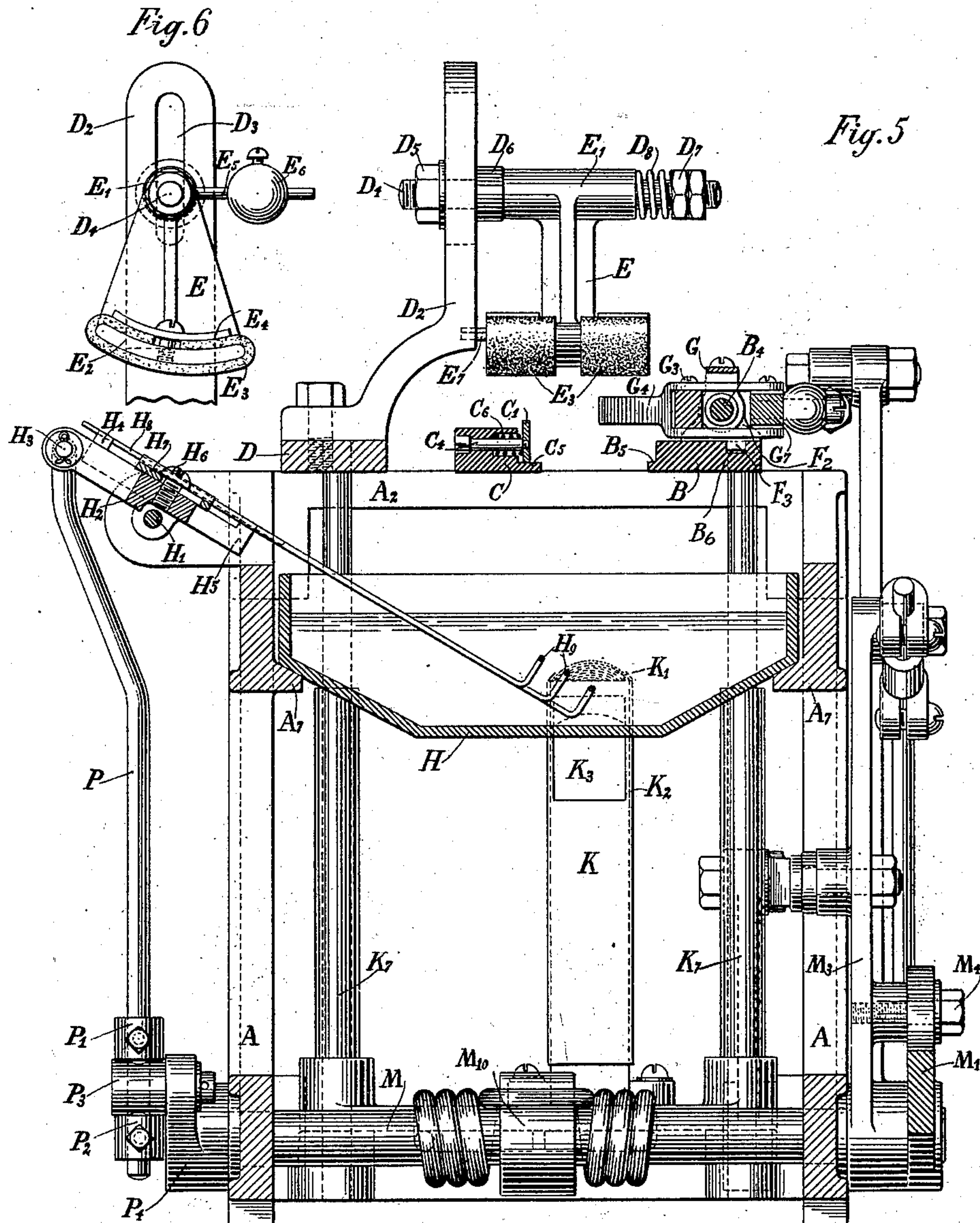
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4 Sheets—Sheet 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ESSINGTON N. GILFILLAN AND EDDY T. MCKAIG, OF CHICAGO, ILLINOIS,
ASSIGNORS TO NEW YORK LABELLING MACHINE COMPANY, A CORPORATION OF NEW YORK.

LABELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 692,055, dated January 28, 1902.

Application filed July 26, 1901. Serial No. 69,753. (No model.)

To all whom it may concern:

Be it known that we, ESSINGTON N. GILFILLAN and EDDY T. MCKAIG, citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Labeling-Machines, of which the following is a specification, taken in connection with the accompanying drawings, in which the same reference characters refer to similar parts in the various figures.

This invention relates to labeling-machines in which articles are intermittently moved along a runway and in which a series of label-applying devices cooperate with the said runway to apply labels to said articles at stations along the runway.

Figure 1 is a side elevation of this machine, parts being broken away. Fig. 2 is a side sectional view taken substantially along the central plane of the machine and looking in the opposite direction from Fig. 1. Fig. 3 is a plan view. Fig. 4 is a detail of the feeding devices. Fig. 5 is a transverse section. Fig. 6 is a detail of the retainer. Figs. 7 and 8 show the pressure-pad in detail. Figs. 9 and 10 show the construction of the label-box.

The frame of the machine is formed of two side members A of any desired material, such as cast-iron, connected together by the transverse members A', A², A³, and A⁴ to serve to rigidly connect the side members to form a rigid frame. It will be noted that the transverse member A' forms a considerable extension at the rear of the machine and constitutes a receiving-table, as is seen in Fig. 3. The gage B⁷ is adjustably mounted on this table by a bolt, which coacts with the slot B⁸ in the table.

The longitudinal guide-pieces B and C are rigidly secured to the transverse members A' and A² by suitable bolts, the guide C being adjustable transversely of the machine, since the bolts C² secure this member to the frame and pass through suitable slots C³ in the transverse members. The spring-pressed device C' is mounted on the inner side of the guiding member C and is pressed inward at a number of points along its length by springs C⁶, located in the cavities in the member C, while the spring-pressed guide is mounted on

screws C⁴, rigidly secured to it, which fit loosely in holes in the guide C. In this way a slight amount of movement is allowed to this guide, and the width of the runway is therefore variable to some slight extent to allow articles to be held closely without cramping. It will be apparent, of course, that this spring-pressed guide might be located on the guide member B at the other side of the runway, where its operation will be substantially similar. Both the members B and C are formed with lower flanges B⁵ C⁵ at their inner edges, upon which articles fed along the runway are supported.

The longitudinal supporting member D is rigidly secured to the frame of the machine by bolts D' at either end, and upon this member are bolted the standards D² for the retainers. These standards are provided at their upper ends, which are substantially above the runway, with vertical slots D³. The retainer-pivots D⁴ are secured to these supporting members D², since each pivot D⁴ passes through a slot D³ and is clamped in position by the nut D⁵, which holds the pivot in position at any desired height. The retainer E is pivoted on the pivot D⁴, the bearing portion of the retainer E' coming in contact with the collar D⁶ upon the pivot, as is shown in Fig. 5. A spring D⁸ is secured at one end to the bearing portion E' of the retainer, and at its other end is rigidly secured to the nut D⁷, which may be rigidly secured on the threaded part of the pivot by the lock-nut shown. In this way the spring D⁸ holds the retainer against the collar D⁶ of the pivot, and at the same time the spring tends to rotate the retainer about its pivot, and this action of the spring may be adjusted by adjusting the nut D⁷. The lower surface of the retainer E², where it comes in contact with the articles fed along the runway, is slightly eccentric with respect to the pivot about which the retainer moves, so that this retainer has a wedging action upon articles with which it comes in contact. The face of the retainer is covered with any desired yieldable material, such as leather or rubber, and this facing E³ is secured to the retainer by a clamping-plate E⁴, secured to the lower part of the retainer. One of these clamping-plates has a lateral extension

sion E⁷, which comes in contact with the adjacent parts of the support D² and prevents the rotation of the retainer in one direction. The counterweight E⁶ is adjustably mounted
 5 on the arm E⁵, extending from the retainer, and it is evident that by adjusting this counterweight the retainer acts with more or less force to hold an article in position on the runway.

10 The reciprocating feeder F is mounted upon the feeder-guide B⁴, which consists of a rod extending longitudinally of the machine at one side of the runway and which is secured to the members B³. Bolts B² hold these mem-
 15 bers to the longitudinal member B by passing through suitable slots B¹ in this member, so that the feeder-guide may be adjusted longitudinally of the runway. Suitable washers of yieldable material may be placed around
 20 this guide at either end of the same to cushion the action of the feeder.

The feeder F consists of a tube embracing the rod B⁴ and sliding upon it. To this tube are secured the end pieces F¹, which may, if
 25 desired, be made with flattened lower surfaces to engage the upper surface of the member B to guide the feeder in its reciprocation. The guiding member F² is also rigidly secured to the feeder and is provided
 30 with a flat lower surface to engage the member B and is also provided with a depending lug F³, which reciprocates in a slot B⁶, cut in the member B to prevent the displacement of the feeder and insure its exact reciprocation. Upon the reciprocating feeder are
 35 mounted the feeding-pawls F⁷, which are pivoted to the supports F⁴, so as to move about the pivots F⁶ thereon, and these supports are in the form of a split ring embracing the
 40 feeder-tube and clamped thereto by the screws F⁵. It will be noted by reference to Fig. 4 that the projection F⁸ upon the feeding-pawls prevents further outward movement of the
 45 pawls than is shown in that figure by coming in contact with the support upon which the pawl is mounted. The spring F⁹, mounted in a hole in the pawl, engages the feeder-tube and presses the pawls outward in a yielding manner. It is evident, therefore, that each
 50 one of the pawls is always yieldably pressed outward from the feeder-rod, so as to project into the runway, and that each one of these pawls is adjustably mounted upon the feeder. The holding-pawls G⁴ are mounted to move
 55 about pivots G³ and have their free ends G⁵ formed to embrace the front end of an article to be labeled, such as a bottle, as is shown in Fig. 4. It is of course understood that the formation of the free ends of these pawls may
 60 be varied as desired to suit the particular nature of the article to be labeled. The supports G¹ are formed in similar manner to the supports F⁴ and are clamped upon the feeder-rod in a similar way by the screws G². Each
 65 one of the supports G¹ for the holding-pawls is rigidly connected to the connector G, as is seen in Fig. 1, so that these three holding-

pawls, together with their supports, may be moved bodily along the feeder when the clamping-screws are released and adjusted as
 70 a unit in any position. So that if it is desired to adjust the feeder for a different size of article to be labeled the connector and the holding-pawls are moved together, so that
 75 each one of the holding-pawls is simultaneously adjusted to coact with the corresponding feeding-pawl. The outer ends of the holding-pawls are pivoted at G⁶ to the actuating-bar G⁷, and this bar has bolted to it the
 80 pivot G⁹, formed with a head G⁸ on its inner side, so that this head coming in contact with the feeder F limits the inward movement of the holding-pawls. This mode of actuation
 85 secures the simultaneous and parallel movement of all the holding-pawls. It is understood, however, that it is not necessary to employ the exact means which has been disclosed for actuating these holding-pawls so
 90 long as they are positively moved into engagement with the articles on the runway.

Beneath the runway and in operative relation thereto are mounted the label-applying devices consisting, as is shown in Fig. 2, of the paste apparatus, the label-box, and the
 95 pressure-pad for smoothing the label after it is applied to the article to be labeled. These label-applying devices are mounted at stations along the runway directly under each
 100 of the retainers, so that as they operate upon an article to be labeled the article is held down against the guiding members composing the runway by the pivoted retainer, the
 105 articles of course being stationary at the stations at the time the label-applying devices operate upon them.

The paste apparatus comprises a paste-receptacle H, removably mounted upon inwardly-projecting ledges A⁷ on the side members of the frame, and the paste-wires H⁹ are
 110 mounted to dip into the paste in this receptacle and to move up into contact with an article to be labeled to apply a number of lines of paste to such article. Three of these paste-wires H⁹ are shown turned upward at their
 115 inner parallel ends and mounted in a supporting member H⁷. This supporting member is provided with a guide-piece H⁸, which slides in two guides H⁴ H⁵, and the supporting member may be clamped in any desired
 120 position by the screws H⁶, which pass through suitable slots H¹⁰ in the support. The paster rotates about the axle H¹, upon which the frame H² is loosely mounted, the frame being oscillated through the connecting-arm P,
 125 which is provided with a pivot H³, connected to the frame of the paster. The label-box K is formed of substantially rectangular cross-section and is provided at its upper end with narrow inwardly-projecting ribs K¹ to retain the labels in the box. The box is formed, as
 130 is indicated in Fig. 5, with the aperture K², by which labels may be inserted, as desired, in the box. This box fits loosely upon the label-plunger K³, provided with a rounded

upper end substantially parallel to the labels, as shown in dotted lines in Fig. 5, so as to cause these labels to protrude from the upper end of the label-box. The upper label of the pile in the box is forced into contact with the pasted article on a runway when the label-box is raised and the top label adheres to the article, so that when the label-box is lowered the top label is drawn out of the box and remains pasted to the article. The plunger is adjustably secured to the plate K^4 , and this plate is provided with two dowel-pins K^5 , which fit in apertures in the label-support K^6 to hold the label-box in position on this support and for the purposes of readily adjusting the position of the label-box with reference to the runway. It is preferred to employ a number of label-boxes, together with their plungers and plates, the dowel-pins K^5 in these plates being set at different distances from the center plane of the label-box, so that by placing a different label-box and plate on the label-support the label-box is shifted laterally of the label-support, and therefore is adjusted into proper relation with the runway for labeling articles of a different size. Also, since an adjustment of the label-plunger upon the plate is provided, each one of the label-boxes is adjusted into perfect alinement, so that the labels are always applied in correct position upon the articles to be labeled. The label-support K^6 carries two guiding-tubes K^7 , which embrace the guide-rods A^5 on either side of the support to insure the proper vertical reciprocation of the label-box. The end M^9 of the spring M^8 engages the under surface of the label-support and serves to raise the label-box, as desired.

The pressure-pad L is formed of any suitable yielding material, such as rubber, and is clamped in position upon the pressure-plate L^2 by screws, which serve to secure the clamping-piece L^1 in proper position, and, as indicated in Fig. 2 of the drawings, the clamping-piece is provided with enlarged holes for these screws, so that suitable adjustment is allowed between the pressure-pad and the pressure-plate. The pressure-plate is secured to the pressure-support L^6 by the wing-nut L^5 on the screw L^4 , and there are also formed on the lower surface of the pressure-plate the two dowel-pins L^3 , which fit in apertures in the pressure-support, and, as indicated in Fig. 7, it is intended to provide a number of pressure-pads of substantially the same size, although they may be formed of different sizes, if desired, in which the dowel-pins are set at different distances from the center line of the pad. In this way there is secured the ready adjustment of the pressure-pad upon the pressure-support in a way similar to the method employed in connection with the label-box.

The machine is operated through an operating-lever M^1 , formed at its outer end with a suitable handle, which is loosely mounted upon the rock-shaft M . The lever M^3 is rigidly secured on this rock-shaft in any desired

position by the set-screw shown, and the bolt M^4 , passing through a circular slot M^2 in the operating-lever, serves to clamp this lever to the lever M^3 , and thereby to actuate the rock-shaft M by means of the operating-lever. The bolt M^6 , which is secured to the upper end of the lever M^3 , fits loosely in the sleeve M^7 , and this sleeve embraces the rod O^7 , so that the sleeve operates between the two adjustable stops O^8 and O^9 on this rod. The lever O^1 , secured to the rock-shaft O by a set-screw, carries the pivot O^6 , to which the forward end of the rod O^7 is connected. The pivot O^2 in the upper end of the lever O^1 is loosely connected with the sleeve O^8 , adjustably mounted at the forward end of the rod O^4 . The rear end of this rod is formed with the eye O^5 , through which passes the pivot G^9 , which serves, as has been explained, to swing the holding-pawls on their pivots and also, as would be apparent, to reciprocate the feeder longitudinally of the runway. The spring M^8 (shown in Fig. 2) is secured at its inner end to the rock-shaft M by the sleeve M^{10} , adjustably mounted on this rock-shaft, and after passing several times around the rock-shaft on either side of this member the free ends M^9 of the spring extend forward under the label-support and serve to yieldingly raise this support into contact with the article to be labeled. A spring N^4 is similarly connected with the rock-shaft N by the piece N^6 , adjustably mounted on this rock-shaft, and the arm N^1 , pivoted at N^2 to the link N^3 , serves to oscillate the rock-shaft N , and thereby to raise the pressure-pad. The rear end of the link N^3 is pivoted at M^5 to the lever M^3 . The crank P^1 is adjustably secured to the rock-shaft M , as best shown in Fig. 5, and the crank-pin P^3 is rotatably mounted in this crank-arm to actuate the rod P , which operates the paster. This rod P passes loosely through the crank-pin, and the adjustable stops P^1 P^2 upon it serve to reciprocate the rod and allow as much backlash as is desired to reciprocate it to any desired extent.

The operation of the machine is as follows: The operating-lever M^1 is moved downward from the position shown in Fig. 1, and this serves to raise the labeling devices toward the articles on the runway through the mechanism which has just been described. Furthermore, after the sleeve M^7 comes into contact with the stop O^9 the bar G^7 , connected to the holding-pawls, is reciprocated to move the holding-pawls out of contact with articles on the runway, and thereafter the feeder is moved to the rear of the machine along the feeder-guide B^4 . While this movement is taking place, labeling devices come into contact with the articles at the several stations along the runway and operate upon these articles R^1 R^2 R^3 , as indicated in Fig. 2, while they are held down upon the runway by the retainers. Then another article, which may be a bottle, box, or package, having been

placed on the runway against the gage B⁷, the operating-lever is moved upward from the position indicated in Fig. 2. The labeling devices are thereupon moved downward out of contact with the articles at the several stations, and thereafter, the sleeve M⁷ coming into contact with the stop O⁸, the holding-pawls are moved about their pivots into contact with the articles to be labeled to positively grip these articles in connection with the feeding-pawls. Then the feeder is reciprocated to feed each of the articles on the runway forward one station, the article R¹ assuming the position R², and so on, the article R³ being taken from the forward end of the machine. This operation is repeated indefinitely, and it will be seen that the articles are intermittently and positively fed forward from station to station while they are held down in contact with the runway by the retainers. The pivoted retainers are freely movable and are moved about their pivots by an article fed along the runway by the feeder. Referring to Fig. 2, it will be seen that when an article—R¹, for instance—is moved along the runway from right to left in that figure by the reciprocating feeder the forward end of this article will engage the retainer and will swing this retainer in the direction in which the article is fed, so that the article passes under the retainer. The retainer moves downward as soon as the article becomes stationary, and thus automatically clamps the article in position upon the guiding members which constitute the runway. Then when the article is again fed forward by the feeder the retainer moves with it, so as to release the clamping action of the retainer. In the continuous operation of the machine the articles are reciprocated quickly along the runway, and the automatically-operating retainers are engaged by the articles in such a manner as to be swung out quite forcibly, so that they swing clear of the articles passing under them, and then when the articles become stationary they swing back and grip these articles firmly. The adjustable weight and spring upon the retainers are useful in adjusting the period of the swing of the retainers, so that when engaged by an article they swing out and then swing back to engage the article almost as soon as it comes to rest upon the runway. It is understood, however, that it is not necessary in all cases to employ either the adjustable weight or the adjustable spring on the retainers, since in some cases the retainers may be made of the desired weight and shape to give the proper automatic action. The degree of eccentricity also of the retainers may be varied as well as the length of the retainers from the eccentric gripping-faces to their pivots. With movable wedging-retainers, such as are employed, the retainer accommodates itself to the particular article on the runway, the retainer being swung away from the vertical by the

article as it passes under it and at once swinging back about its pivot under the combined influence of its weight and the actuating-spring to wedge the article positively against the runway. It will be seen that by this means bottles and other articles of irregular shape may be readily labeled. If, for instance, such an article had a tapering form the retainer would positively grip the article and hold it down in proper contact with the runway and the label-applying devices at all the stations.

It is of course apparent to those skilled in this art that it is not necessary to mount the retainers in exactly the way which has been disclosed so long as they properly engage the articles upon the runway.

While it is not necessary to form the runway exactly as has been disclosed so long as the retainers and labeling devices properly coact with the articles on the runway, yet it is advantageous to form the runway open at the top, since in this case any article may readily be removed from the machine by simply releasing it from the retainer and withdrawing it from the runway. Since numerous changes in the construction of this machine may be made by those skilled in the art and since it is possible to employ parts of this invention without using all of the same, we do not wish to be limited by the disclosure which we have made in this case.

What we claim as new, and what we desire to secure by Letters Patent, is set forth in the appended claims, as follows:

1. In a labeling-machine, a runway composed of lower guiding members, one of said members being laterally adjustable to vary the width of said runway, a spring-pressed guide on the inner edge of one of said guiding members, movable retainers mounted above said runway at stations along the same to engage articles fed along the runway and to hold them in contact with the lower guiding members, a reciprocating feeder, a feeder-guide on which said feeder reciprocates mounted adjacent said runway, a series of feeding-pawls and a series of holding-pawls mounted on said feeder, label-applying devices mounted beneath said runway at said stations, means to actuate said label-applying devices and to operate said reciprocating feeder to intermittently feed forward a series of articles along said runway and to apply labels to such articles at said stations.

2. In a labeling-machine, a runway comprising lower guiding members, one of said members having a spring-pressed guide mounted on its inner edge, movable retainers mounted above said runway at stations along the same, a reciprocating feeder, a feeder-guide mounted adjacent said runway and adjustable longitudinally thereof to adjust the extent of movement of said feeder, a series of feeding-pawls and a series of holding-pawls mounted on said feeder, label-applying devices mounted below said runway at the sta-

tions along the same and means to operate said label-applying devices, said reciprocating feeder and said holding-pawls thereon to intermittently and positively feed forward a series of articles along said runway and to apply labels to said articles while at said stations.

3. In a labeling-machine, a runway comprising a guiding member provided with a spring-pressed guide on its inner face, movable retainers mounted adjacent said runway at stations along the same, a reciprocating feeder, a feeder-guide mounted adjacent said runway, a series of feeding-pawls and a series of positively-actuated holding-pawls mounted on said feeder, label-applying devices mounted adjacent said runway at said stations on the opposite side of said runway from said retainers and means to actuate said label-applying devices and said feeder to positively and intermittently feed a series of articles along said runway and to apply labels to such articles while at such stations.

4. In a labeling-machine, a runway, movable retainers mounted adjacent said runway at stations along the same, a reciprocating feeder, a guide for said feeder adjacent said runway, a series of feeding-pawls and a series of holding-pawls mounted on said feeder, label-applying devices mounted adjacent said runway at said stations to cooperate with said retainers and means to actuate said label-applying devices and said reciprocating feeder to intermittently feed a series of articles along said runway and to apply labels to said articles while at said stations.

5. In a labeling-machine, a runway, movable retainers mounted adjacent said runway at stations along the same, a feeder to intermittently feed a series of articles from station to station along said runway, label-applying devices mounted adjacent said runway at the stations along the same to cooperate with said retainers and means to operate said label-applying devices and said feeder.

6. In a labeling-machine, a runway, freely-movable retainers mounted adjacent said runway at stations along the same, a feeder to intermittently and positively move a series of articles from station to station along said runway, label-applying devices mounted at said stations to cooperate with said retainers and means to operate said label-applying devices and said feeder.

7. In a labeling-machine, a runway, freely-movable automatically-operating retainers mounted adjacent said runway at stations along the same to hold a series of articles in position at said stations, a feeder to intermittently feed a series of articles from station to station along said runway, and label-applying devices mounted adjacent said runway to cooperate with said retainers.

8. In a labeling-machine, a runway, automatically-operating pivoted retainers mounted adjacent said runway at stations along the same to hold a series of articles in position at

said stations, a feeder to intermittently move a series of articles from station to station along said runway and label-applying devices mounted at said stations along said runway to cooperate with said retainers.

9. In a labeling-machine, a runway, pivoted wedging-retainers mounted adjacent said runway at stations along the same to hold a series of articles in position at said stations, a feeder to move a series of articles from station to station along said runway, and label-applying devices mounted adjacent said stations to cooperate with said retainers to apply labels to articles at said stations.

10. In a labeling-machine, a runway, pivoted wedging spring-actuated retainers, mounted adjacent said runway at stations along the same to hold a series of articles in position at said stations, a feeder to move a series of articles from station to station along said runway and label-applying devices mounted adjacent said runway to apply labels to said articles at said stations.

11. In a labeling-machine, a runway, a series of labeling devices mounted at stations along said runway to intermittently operate in connection with the same, a series of automatically-operating retainers mounted adjacent said runway at said stations and a feeder to intermittently feed forward a series of articles from station to station along said runway into engagement with said retainers.

12. In a labeling-machine, a runway, a series of labeling devices mounted at stations along said runway to intermittently operate in connection with said runway, a series of pivoted wedging automatic retainers mounted to cooperate with said runway at said stations and a feeder to intermittently feed a series of articles from station to station along said runway into contact with said retainers.

13. In a labeling-machine, a runway, an intermittently-operating labeling device mounted to cooperate with said runway, a pivoted automatic retainer having an eccentric working face mounted adjacent said runway near said labeling device and a feeder to intermittently feed articles along said runway into contact with said retainer.

14. In a labeling-machine, a runway, an intermittently-operating labeling device mounted adjacent said runway, an automatic wedging-retainer mounted adjacent said labeling device to clamp an article upon said runway and a feeder to intermittently feed articles along said runway into contact with said retainer.

15. In a labeling-machine, a runway, an intermittently-operating labeling device mounted below said runway, a freely-movable retainer having an eccentric working face pivoted above said labeling device to clamp articles upon said runway and a feeder to intermittently feed articles along said runway into contact with said retainer.

16. In a labeling-machine, a runway, a retainer having an eccentric working face of

yieldable material pivoted so as to be freely movable above said runway and an intermittently-operating feeder to feed articles along said runway into contact with said retainer to clamp said articles upon said runway by said retainer.

17. In a labeling-machine, a runway, a retainer having an eccentric working face pivoted so as to be freely movable above said runway and a feeder to intermittently feed articles along said runway into contact with said retainer to clamp said articles upon said runway by said retainer.

18. In a labeling-machine, a runway, a freely-movable retainer mounted adjacent said runway and a feeder to intermittently feed articles along said runway into contact with said retainer to clamp said articles to said runway by said retainer.

19. In a labeling-machine, a runway, an automatic wedging-retainer mounted to cooperate with said runway and a feeder to intermittently feed articles along said runway into contact with said retainer to clamp said articles to said runway by said retainer.

20. In a labeling-machine, a runway, a freely-movable pivoted wedging-retainer mounted adjacent said runway, a spring connected to said retainer to move the same about its pivot, means to adjust the intensity of action of said spring and a feeder to intermittently feed articles along said runway into contact with said retainer to clamp said articles to said runway by said retainer.

21. In a labeling-machine, a runway, an automatic pivoted retainer adjacent said runway, an adjustable weight on said retainer, an adjustable spring connected to said retainer to adjust the quickness and intensity of action of said retainer and a feeder to intermittently feed articles along said runway into contact with said retainer to clamp said articles to said runway by said retainer.

22. In a labeling-machine, a runway, a freely-movable pivoted retainer mounted above said runway, a labeling device mounted below said retainer to operate upon articles on said runway through an opening in the same and a feeder to move articles along said runway to engage said retainer and to cause said articles to be automatically clamped by said retainer upon said runway and to be released from said retainer.

23. In a labeling-machine, a runway, a freely-movable retainer pivoted above said runway to automatically clamp articles upon said runway, a labeling device mounted below said retainer to operate upon articles clamped upon said runway by said retainer and a feeder to move articles under said retainer and to remove said articles from said retainer.

24. In a labeling-machine, a runway, a freely-movable wedging-retainer mounted above said runway to automatically clamp articles to said runway and a feeder to intermittently move articles along said runway to

said retainer and to remove said articles from said retainer.

25. In a labeling-machine, a runway, a reciprocating feeder, a feeder-guide mounted adjacent said runway, a series of pivoted feeding-pawls mounted on said feeder, a connector adjustably mounted on said feeder, a series of pivoted holding-pawls mounted on said connector to readily adjust the position of each of said holding-pawls with respect to its cooperating feeding-pawls and means to operate said holding-pawls.

26. In a labeling-machine, a reciprocating feeder, a series of feeding-pawls mounted on said feeder, a connector adjustably mounted on said feeder, a series of holding-pawls mounted on said connector to readily adjust the distance between each one of said holding-pawls and its cooperating feeding-pawl and means to operate said holding-pawls.

27. In a labeling-machine, a reciprocating feeder, a series of spring-pressed feeding-pawls mounted on said feeder, a connector adjustably mounted on said feeder and a series of positively-actuated holding-pawls mounted on said connector to readily adjust the distance of each of said holding-pawls with respect to its cooperating feeding-pawl.

28. In a labeling-machine, a runway having an open top, a reciprocating feeder, a guide for said feeder, mounted at one side of said runway, and a series of movable retainers mounted above said runway at stations along the same to hold a series of articles upon said runway at said stations.

29. In a labeling-machine, a runway having an open top, a reciprocating feeder mounted at one side of said runway, a series of pivoted retainers mounted above said runway at stations along the same to hold a series of articles in contact with said runway and a series of label-applying devices below said runway at said stations.

30. In a labeling-machine, a runway, a series of freely-movable retainers pivoted above said runway at stations along the same to automatically clamp a series of articles to said runway at said stations and a feeder to engage a series of articles to feed said articles simultaneously from station to station along said runway.

31. In a labeling-machine, a runway, a series of freely-movable retainers pivoted above said runway at stations along the same, the lower faces of said retainers being eccentric with respect to said pivots, and a reciprocating feeder to simultaneously engage a series of articles and to feed said articles from station to station along said runway to engage said retainers and to be automatically clamped upon said runway at said stations by said retainers.

32. In a labeling-machine, a runway, a freely-movable retainer mounted above said runway, a labeling device mounted below said retainer to cooperate with said runway, a reciprocating feeder to feed articles along said

runway to said retainer to be automatically
clamped by said retainer upon said runway
and means connected with said feeder to op-
erate said labeling device while an article is
5 clamped to said runway by said retainer.

33. In a labeling-machine, a runway, a
wedging-retainer pivoted above said runway,
a labeling device mounted below said re-
tainer, a feeder to feed articles along said

runway to move said retainer and be thereby
clamped upon said runway and means to ac-
tuate said feeder and said labeling device.

ESSINGTON N. GILFILLAN.
EDDY T. MCKAIG.

Witnesses:

FRANK A. ACER,
HARRY L. DUNCAN.