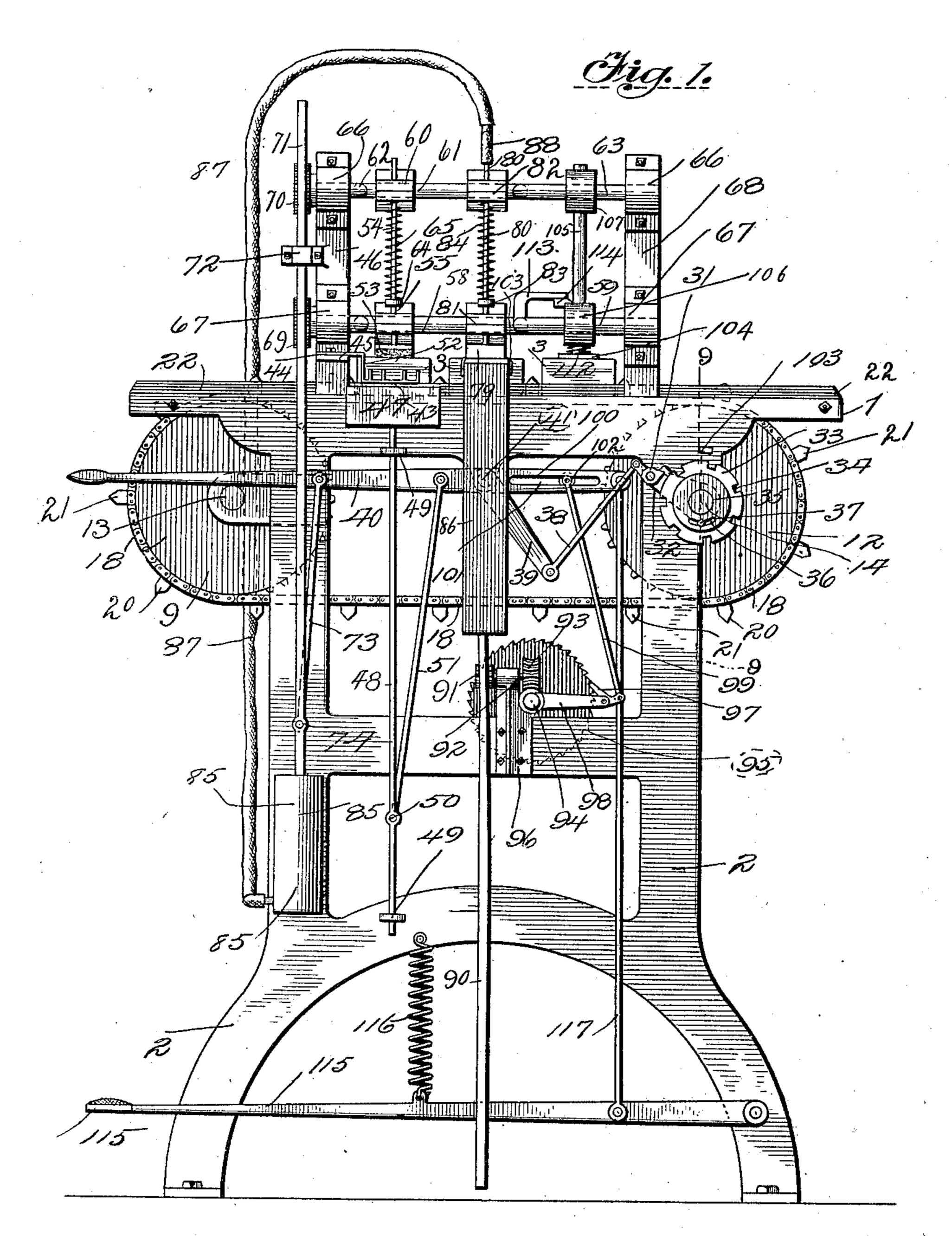
E. T. McKAIG. LABELING MACHINE.

APPLICATION FILED NOV. 23, 1901.

NO MODEL.

4 SHEETS-SHEET 1.



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Inventor: C. I Mc Kong Cecust Hopornia No. 722,035.

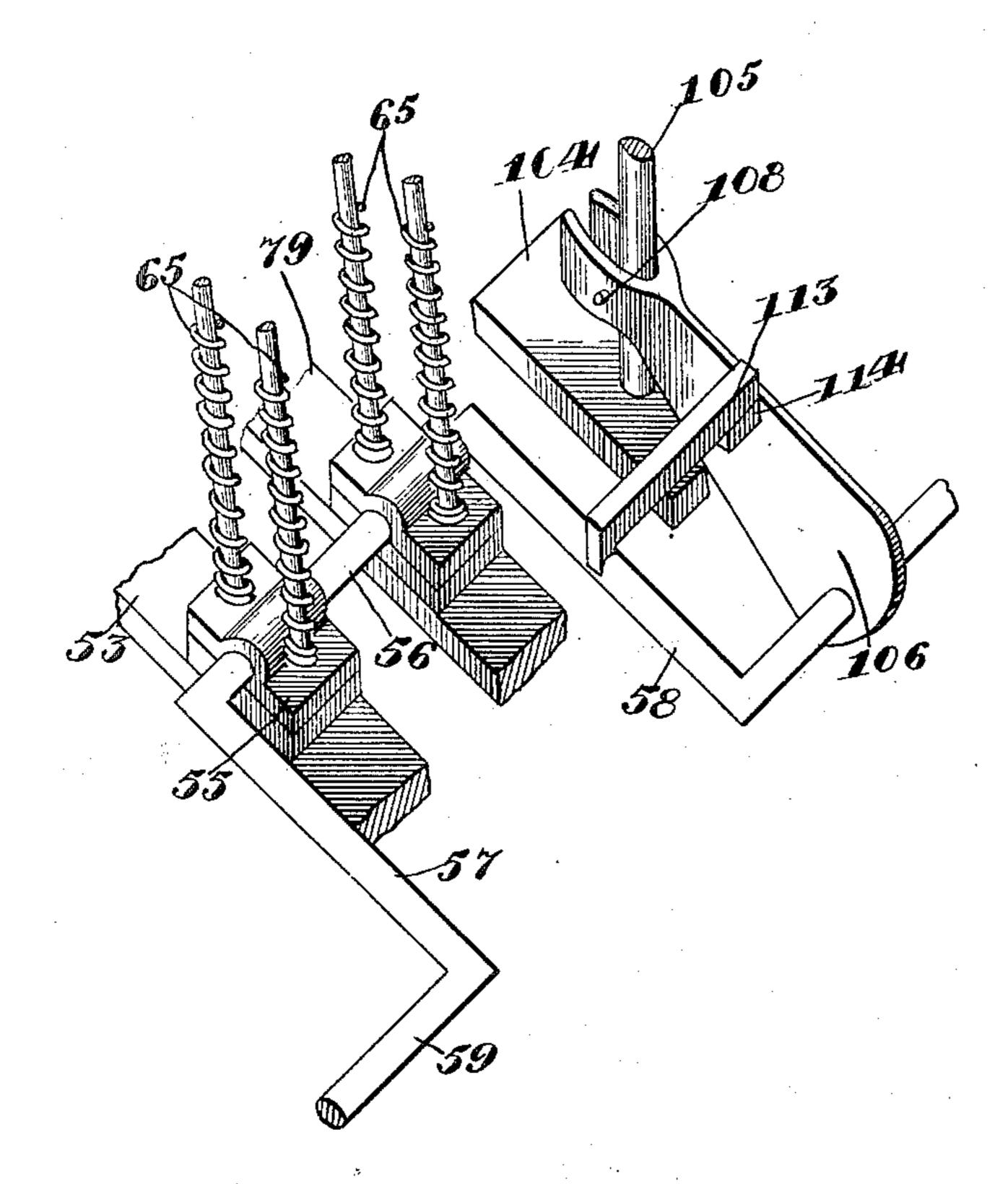
PATENTED MAR. 3, 1903

E. T. McKAIG. LABELING MACHINE. APPLICATION FILED NOV. 23, 1901.

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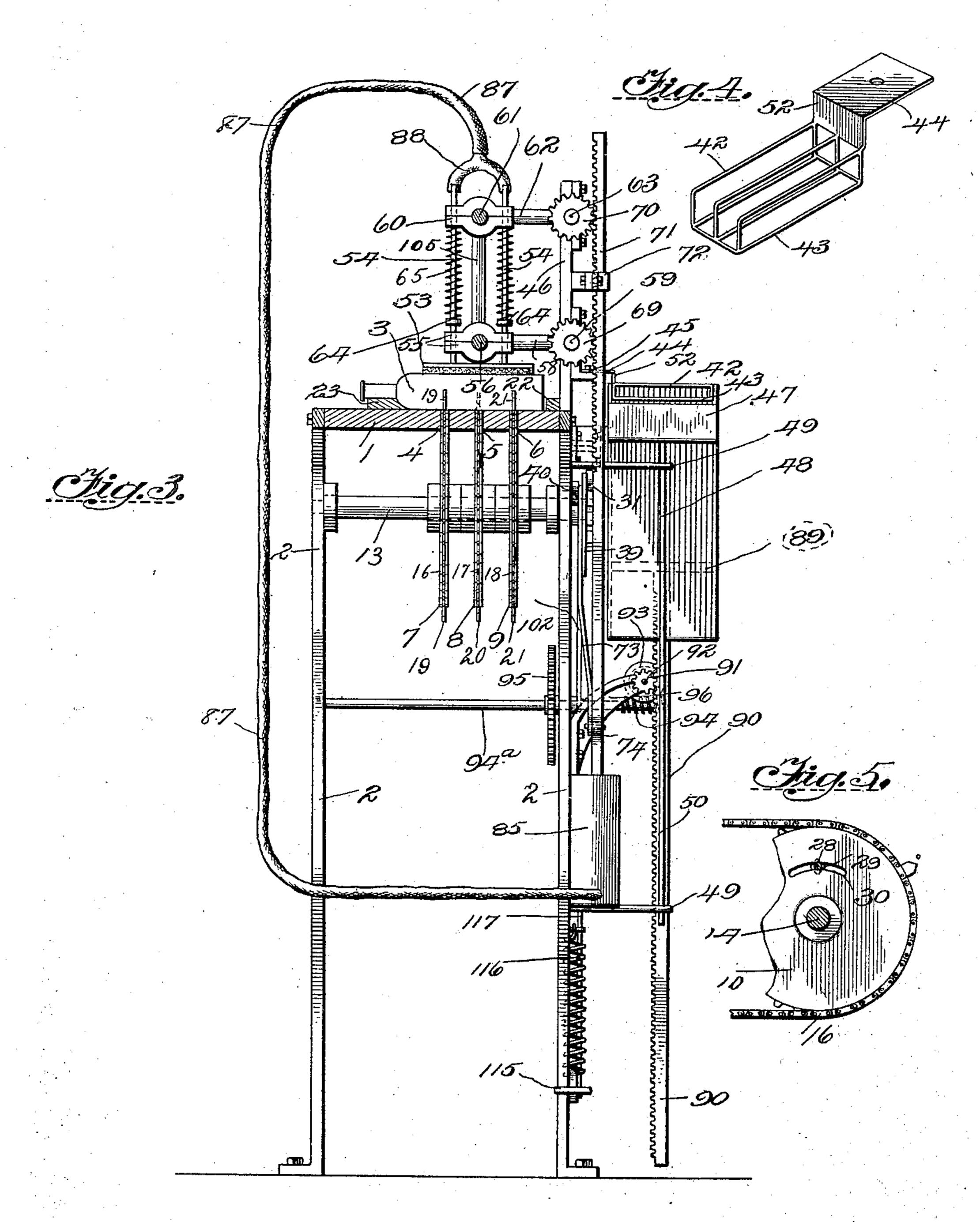
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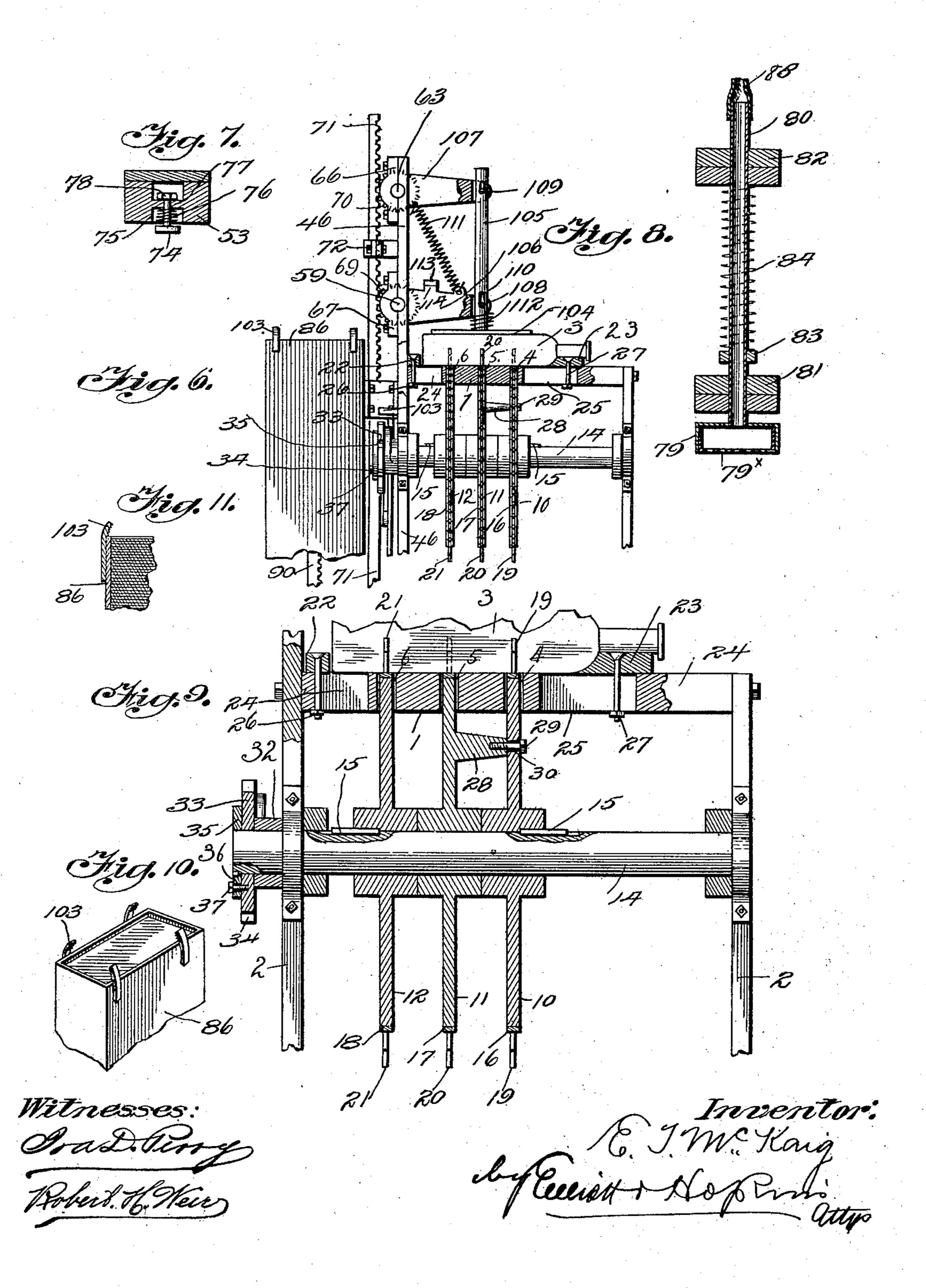
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NO MODEL.

4 SHEETS-SHEET 4.



UNITED STATES PATENT OFFICE.

EDDY T. McKAIG, OF CHICAGO, ILLINOIS, ASSIGNOR TO H. A. WHEELER, OF CHICAGO, ILLINOIS.

LABELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 722,035, dated March 3, 1903.

Application filed November 23, 1901. Serial No. 83,421. (No model.)

To all whom it may concern:

Be it known that I, EDDY T. MCKAIG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Labeling-Machines, of which the following is a full, clear, and exact specification.

My invention relates more particularly to that class of labeling-machines in which the bottles or other objects to be labeled are fed consecutively under three pressure - pads, which serve, respectively, for applying paste to the object, placing the label upon the paste-coated surface, and finally pressing the label adhering to the said surface, so as to force out the wrinkles and cause perfect adhesion. One of the great objections to machines of this character is that the pressure of these pads upon the bottle often breaks it and causes the fragments and contents to fall into the paste trough or receptacle, and thereby spoil the paste.

One of the important objects of my invention, therefore, is to so construct and arrange the parts that the paste-trough will be to one side of the line of movement of the bottle, so that in the event the bottle breaks the fragments and contents will not fall into the trough or otherwise interfere with the perfect operation of the machine.

Another object of my invention is to arrange the label box or holder to one side of the line of movement of the bottle and provide improved means for conducting the labels one at a time from such holder and pressing them against the bottle at a point re-

ing them against the bottle at a point removed from the label-holder, so that in the event the bottle should break during such pressure the contents will not be spilled over the supply of labels.

Other objects of my invention are to improve and simplify the construction of labeling-machines of this character, whereby labels may be rapidly applied and the parts of the machine may be readily adjusted to accommodate various sizes of bottles or other objects to be labeled.

With these ends in view my invention conso sists in certain features of novelty by which the said objects and certain other objects

hereinafter appearing are attained, all as fully described with reference to the accompanying drawings and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a side elevation of my improved labeling - machine. Fig. 2 is a detail perspective view of the cranks and pads carried thereon for respectively applying the paste, sticking the label, 60 and pressing the label, as will be hereinafter explained. Fig. 3 is a front or end elevation of the machine. Fig. 4 is a detail perspective view of the paste-grid, hereinafter described. Fig. 5 is a detail side elevation of 65 one of the sprocket-wheels and chain thereon. Fig. 6 is an end elevation of part of the machine looking in the opposite direction from the view taken in Fig. 3. Fig. 7 is a detail transverse section of the paste-applying pad. 70 Fig. 8 is a transverse sectional view of the label-applying pad with one of its supporting-stems. Fig. 9 is a transverse sectional view of a part of the machine, taken on a line 9 9, Fig. 1, on an enlarged scale. Fig. 10 is 75 a perspective view of the upper end of the label box or holder, and Fig. 11 is a transverse sectional view of a portion thereof.

1 is a flat table upon which the bottles rest and along which they slide while receiving 80 successively the paste, the label, and the necessary pressure for causing the label to adhere. This table 1 is supported by any suitable frame 2 and is provided along the line of movement of the bottle 3 with a number of 85 parallel slots 4 5 6, projecting upwardly, through which at one end of the table are three sprocket-wheels 789, respectively, and at the other end three sprocket-wheels 10 11 12, respectively. The sprocket-wheels 789 90 are mounted loosely upon a front shaft 13, supported in the side members of the frame 2, while the other three sprocket-wheels 10 11 12 are mounted upon a rear shaft 14, rotatably mounted in such frame members. The 95 outside sprocket-wheels 10 12, however, are secured by keys 15 or other suitable means to the shaft 14, while the intermediate sprocketwheel 11 is loose upon the shaft 14, as clearly shown in Fig. 9. The sprocket-wheels 7 10 105 are connected together by sprocket-chain 16, the sprocket-wheels 811 by sprocket-chain 17,

and the sprocket-wheels 9 12 by sprocketchain 18, and these chains 16 17 18 or any other suitable belts which may be employed in their stead are provided, respectively, with 5 lugs 19 20 21, projecting upwardly therefrom, so as to protrude through the aforesaid slots in the table 1 and travel along said slots above the plane of the table as the sprocket-wheels are rotated. These lugs 192021 are arranged 10 quincuncially or staggered and constitute at once means for gaging the proper position of the bottle when placing it in the machine and for advancing the bottle along the table, the lugs 19 21 on the outside chains being so ar-15 ranged as to engage the bottle on one side while one of the lugs 20 on the middle chain engages it on the other side, thereby determining the position of the bottle with reference to the labeling mechanism and holding 20 it squarely upon the table during its advancement through the machine. The position of the ends of the bottle may be gaged and the bottle held against longitudinal movement that is, movement transversely of the chains-25 by two guides 22 23, secured to the upper side of the table 1, parallel with the slots therein at opposite ends of the bottle, so that the bottom of the bottle will slide along one while the shoulder of the bottle will slide along the 30 other, the guide 23 in the example of the invention shown in the drawings being formed complementary in shape to such shoulder. These guides 22 23 may be made adjustable transversely of the table, so as to adapt them 35 for bottles of different lengths. This may be accomplished by providing the table with slots 24 25 at or near each end of each of the guides 22 23 for the passage of set-screws 26 27, which clamp the guides to the table. In order that the distance between the lugs

jacent lug 20 on the middle chain may be varied at will to adapt the device for bottles of different widths, the middle sprocket-wheels 45 are made adjustable relatively to the outside sprocket-wheels in any suitable way that will permit of this relative adjustment of the lugs. In the example shown in the drawings the middle sprocket-wheel 11 is provided with a 50 boss 28 on one side, which is adjustably secured to outside sprocket-wheel 10 by a setscrew 29, which passes through a slot 30 in sprocket-wheel 10, so that the middle sprocket-wheel 11 may be rotated relatively to 55 the outside sprocket-wheels 10 12 until the lugs arrive at the desired position and then locked against independent rotation and compelled to revolve in unison with the other

19 21 on the outside chains and the next ad-

Rotary motion is imparted to the front shaft 14 for causing the lugs on the sprocket-chains to travel along the slots in the table and advance the bottles with an intermittent movement, bringing them successively under the paste, sticking the label to the pasted surface, and pressing the label, as will be presently de-

sprocket-wheels.

scribed, by means of a dog 31, which is pivoted to an arm 32, journaled loosely upon one end of shaft 14 behind a notched wheel 33, 72 suitably connected to the shaft and having a number of notches 34 in the periphery thereof, into which the dog 31 successively engages as the arm 32 is oscillated, and thereby imparts intermittent rotation to the shaft 14 and 75 through the described mechanism moves the lugs 19 20 21 with a step-by-step or intermittent motion along the slots of the table, each step motion being equal to the distance which the bottle has to travel from one of the afore- 80 said pads to the other. Inasmuch, however, as the bottle at the end of each of these movements must be directly under the center of the pad and the adjustment of the middle chain 17 decreases or increases the dis- 85 tance from such center to the next adjacent lug 20 on such chain without correspondingly decreasing or increasing the distance from such center to the lugs 19 21 on the outside chains, it is obvious that in order to main- 90 tain this central position of the bottle with relation to the pad throughout all adjustments of the intermediate lugs 20 for the various-sized bottles the sprocket-wheels 10 12 must also be adjustable rotatively with rela- 95 tion to the notched wheel 33, whose position at the end of each stroke of the arm 32 must always be the same with relation to the dog 31. Consequently the notched wheel 33 is loose upon the shaft 14 and is in operative roc connection therewith through the intermediary of a keyed disk 35, secured on the end of the shaft, and having a slot 36, through which passes a set-screw 37, threaded in the wheel 33, for adjustably clamping wheel 33 105 to disk 35. Thus it will be seen that when the middle sprocket-wheel 11 is adjusted with relation to the outer sprocket-wheels for carrying lug 20 a certain distance away from the center of the aforesaid pad, or nearer to such 110 center, as the case may be, the set-screw 37 will be loosened and the outside sprocketwheels turned until the lugs 1921 are moved the same distance toward or from such cen-When the arm 32 moves in one direc- 115 tion, the notched wheel 33 is rotated and the bottles advanced, and when it moves in the opposite direction the dog 31 releases the wheel 33 and returns a sufficient distance to engage in the next one of the notches 34. 120 This movement is imparted to the arm and dog by a link 38, which is pivoted at one end to one arm of the dog 31, which is in the form of a bell-crank lever, and at the other end to a downwardly-extending arm 39 on an oper- 125 ating-lever 40, which is pivoted at 41 to the main frame and extends horizontally to a position convenient to the hand of the operator.

In Fig. 4 is shown a paste-grid comprising a number of parallel bars 42, supported by a 130 skeleton frame 43, to which is secured a lip or flange 44, which is rigidly attached to a lug 45 on a standard 46, supported on the main frame, and arranged below this paste-

grid is a paste trough or receptacle 47, mounted upon a stem 48, running in guides 49 and having its lower end pivoted at 50 to the lower end of a link 51, whose upper end is 5 pivoted to operating-lever 40, so that each time the latter is raised the paste-grid 42 43 will be submerged in the paste in the trough, the flange or lip 44 having a downwardlyprojecting arm 52, which holds the grid be-10 low the upper edge of the paste-trough when the latter is elevated. When the lever 40 is depressed, the trough will be lowered, leaving the grid 42 in a relatively elevated position with its bars coated with paste ready 15 for contact with a paste-applying pad 53, which alternately moves into engagement with the paste-grid and the bottle. This pad 53 is provided with a pair of stems 54, extending upwardly and loosely through oppo-20 site ends of a journal-box 55, which is journaled upon crank-pin 56, connecting a pair of cranks 57 58 on a crank-shaft 59. The upper ends of these stems 54 pass through opposite ends of a journal-box 60, journaled 25 upon crank - pin 61, connecting a pair of cranks 62 on a crank-shaft 63, arranged above and parallel with and similar in construction and dimensions to the crank-shaft 59. (Shown in detail in Fig. 2.) Each of 30 the arms 54 at a point between the boxes 55 60 is provided with a collar or shoulder 64, and sleeved upon each of the stems between these shoulders and the under side of the box 60 is a spiral spring 65, through the medium 35 of which the paste-pad is pressed against the bottle 3 by the box 60 as the cranks 62 move downwardly, or toward the left as viewed in Fig. 3, thus applying the paste with the requisite pressure without danger of breaking 40 the bottle. The shafts 59 63 are journaled in suitable journal-boxes 66 67, respectively, on standard 46 and a similar standard 68 at the opposite ends of these shafts, (see Fig. 1,) and the shafts 59 63 are provided, respec-45 tively, with cog-wheels or pinions 69 70, with which engages an upright rack-bar 71, held in position by a suitable guide 72, secured to the standard 46 near the upper end of the rack-bar, so that as the rack-bar is raised 50 and lowered the shafts 59 63 will be simultaneously rotated and the crank-pins 56 61 oscillated from left to right and right to left, whereby the paste-pad 53 will be carried first into contact with the paste-grid 42 and then 55 against the bottle. This rising-and-falling movement is imparted to the rack-bar 71 substantially in unison with the movement of the sprocket-chains by the hand-lever 40 through the agency of a connecting-link 73, 60 pivoted to the rack-bar near its lower end at 74. In order to avoid the possibility of the bottle adhering to the paste-pad 53, either by suction or by the adhesiveness of the paste, such

pad may be provided in its under face with a

65 releasing-pin 74a, adapted to be forced up-

tle, but which pin is forced outwardly and holds the bottle down while the pad rises by means of a spring or cushion 76, arranged be- 70 tween the lower headed end of pin 74a and the web 77 in the recess 75, the upper end of pin 74 being passed through said web and provided with a head 78 for preventing its dislodgment.

79 is the label carrying and applying pad shown in detail in Fig. 8. This pad is mounted upon the lower ends of two stems 80, which pass loosely through two journal-boxes 8182, mounted upon crank-pins 56 61, respec-80 tively, like the journal-boxes 55 60, and upon each of the stems 80 is secured or formed a shoulder 83, between which and the under side of the upper box 82 is a coil-spring 84, which by bearing against the shoulder 83 85 and taking its abutment under the box 82 serves to impart the downward movement of the crank 62 to the pad 79 with a yielding pressure, so as to force the label into close contact with the paste-coated surface of the 90 bottle and at the same time avoid an excessive degree of pressure liable to break the bottle. The pad 79 is hollow, as shown in Fig. 8, and its lower face is provided throughout with a number of perforations 79^x, and 95 the hollow interior of this pad is connected in any suitable way to a suction pump or exhauster 85, whose piston-rod is constituted by the lower end of the rack-bar 71, so that each time the operating-handle 40 is elevated the 100 air will be exhausted from the pad 79, and should the pad at this time be resting in contact with the surface of the labels the uppermost one of the latter will be drawn into close adhesion thereto and held thereagainst as 105 long as the vacuum or partial vacuum is maintained, and consequently the labels may be carried one at a time from a label holder or box 86 to the bottle and pressed against the paste-coated surface of the latter as the 110 crank-shafts 59 to 63 are oscillated from left to right, as viewed in Fig. 3. This connection between the pump 85 and the pad 79 is preferably effected by means of a flexible tube 87, connected to the lower end of the 115 pump-cylinder and having a fork or Y 88 at its upper end, connected to the stems 80, which are hollow. The label-box 86 is also supported on the side of the machine, to one side of the line of movement of the bottle across the 120 table 1, and it is open at top and bottom, but contains a movable follower 89, supported upon the upper end of a rack-bar 90, which is engaged by a pinion 91 on shaft 92 of wormwheel 93. Worm-wheel 93 is engaged and 125 rotated by worm 94, secured to ratchet-wheel 95, shaft 92 and ratchet-wheel 95 being journaled in a bracket 96 supported on the main frame. The ratchet 95 is given a step-by-step rotation at each operation of the machine 130 for the purpose of raising the follower 89 a distance equal to the thickness of one label by means of a pawl 97, mounted upon an arm wardly into a recess 75 in the lower face of 98, pivoted upon the shaft 94° of worm 94° pad 53 as the pad descends against the bot-

and having pivotal connection with the pawl 97, which latter is pivoted to the lower end of a link 99, whose upper end is secured to an extension 100 of lever 40, the extension 5 100 being provided with a slot 101, through which passes a set-screw 102 for attaching the link 99 to the extension 100 at various distances from the center 41, so that the extent of elevation of the follower at each opro eration of the lever 40 may be varied for adapting the mechanism to various thicknesses of labels. The upper end of the labelbox 86 is provided with a number of scrapers 103 in the form of inwardly-bent strips or 15 springs, having their inner faces roughened or serrated and slightly overhanging the edges of the box, so that in the event more than one label should be elevated from the pile by the label-carrier pad 79 all but the one in 20 immediate contact with the pad would be scraped off and fall back into the box.

104 is a pressure-pad, whose office is to press the label firmly into contact with the bottle after it has been applied thereto by the suc-25 tion-pad 79, and it is so positioned with relation to the latter pad that when the next bottle reaches the suction-pad the one leaving the latter will come directly under the pressure-pad. The pressure-pad is mounted 30 on the lower end of a stem 105, which passes through the outer ends of two parallel arms 106 107, mounted loosely upon shafts 59 63, respectively, and to these arms 106 107 the stem 105 is connected by means of pins 108 35 109, passing through the stem, the stem being provided with a vertical slot 110 where the pin 108 passes through, so that the stem will have a slight vertical movement independently of the arm 106, thus enabling the arm 40 106 to be supported by a spring 111, having its lower end attached to the arm and its upper end attached to the under side of arm 107 near shaft 63, and to be capable of producing pressure against the pad 104 through 45 the medium of a spring 112, sleeved on the

stem 105 between the pad and the lower side of arm 106. When the pressure of arm 106 is relieved from spring 112, the springs 111 112 conjointly act to return the pin 108 to 50 the upper end of slot 110, and the spring 111 continues to act in elevating both arms 106 107 and stem 105, with the pad 104 thereon, a sufficient distance above the table 1 to insure against the next bottle striking the pad.

55 This downward pressure of the arm 106 against spring 112 is induced by a finger 113, projecting laterally from crank 58 (see Figs. 1 and 2) and arranged to strike a boss 114 on the upper edge of arm 106.

o If desired, the machine may be provided with a treadle 115, normally supported by spring 116 and connected by rod 117 to the arm 100 of hand-lever 40 for the purpose of assisting in the upward movement of said lever.

With the construction thus described it will be seen that when the handle 40 is de-

pressed the paste box or receptacle 47 will be lowered, and the pads 53 79 will be carried from their position on the left (shown in Fig. 70 3) to a diametrically opposite position on the right, directly over and in contact with pastegrid 42 and labels in the label-holder 86, respectively, and when the handle 40 is again raised the pump or exhauster 85 will cause 75 one of the labels to adhere to the pad 79, which will carry it over and press it upon the bottle, which is advanced from the position directly under the paste-pad 53 to a position directly under the label-pad 79, this advancing motion 80 of the bottle being produced, as will be understood, by the upward motion of the arm 39 forcing dog 31 into engagement with one of the notches 34, and thereby rotating all of the sprocket-wheels and causing the lugs on the 85 chains to advance all of the bottles then upon the table. It will be noted, however, from Fig. 1 that the initial or starting position of the dog 31 is a little below the next notch which it meets in its upward travel, so that 90 before the bottles are advanced the pads 53 79 will be raised out of contact with the bottles, and the vacuum in the pad 79 will not only be destroyed, but the label will be forced from the pad by the pressure of air therein 95 induced by the downward motion of the piston in exhauster 85, which takes place during the time that the dog 81 is approaching the notch 34 immediately above it. This method of detaching the label from the suction-pad 10c 79 is preferable to providing an automatic relief-valve which will break the vacuum as soon as the pad places the label firmly upon the bottle. The movement of chains in thus advancing the bottles is limited by a stop 103, 105 which is arranged on the main frame in position to be struck by the dog 31.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

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1. In a labeling-machine, the combination of a support for the object to be labeled, a series of belts having lugs arranged quincuncially or staggered for advancing the object to be labeled along said support and means 115 for applying the label to said object while being thus advanced, substantially as set forth.

2. In a labeling-machine the combination of a support for the object to be labeled, a series of belts having lugs for advancing the 120 said object along said support, the lugs on one of said belts being adjustable relatively to those on the other whereby the distance between the lugs on one belt and those on the other may be varied for adapting to suit different-sized objects to be labeled, and means for applying the label to the object while being advanced along said support, substantially as set forth.

3. In a labeling-machine the combination 130 of a support for the object to be labeled, a plurality of belt-wheels, belts connecting said wheels together in pairs and having lugs extending above said support for advancing the

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object to be labeled therealong, one wheel of one of said pairs being rotatably adjustable relatively to the wheels of another pair, whereby the distance between said lugs may be 5 varied, and means for applying the label to the object while being advanced along said

support, substantially as set forth.

4. In a labeling-machine, the combination of a support for the object to be labeled, a ro plurality of belt-wheels, belts connecting said wheels together in pairs and having lugs extending above said support for advancing the object to be labeled therealong, one wheel of one of said pairs being rotatably adjustable 15 with relation to the other wheels, means for applying the label to the said object while advancing along said support, and means for imparting intermittent rotation to said wheels, substantially as set forth.

5. In a labeling-machine the combination of a plurality of series of lugs for engaging and advancing the object to be labeled, one of said series of lugs being adjustable relatively to the others whereby the distance be-25 tween the lugs of one series and those of another may be varied to suit different-sized objects to be labeled, means for applying the label to the said object while held between said lugs, a power-transmitting means for impart-30 ing a step-by-step or intermittent motion to said lugs and means adjustably connecting part of said power-transmitting means with said series of lugs, substantially as set forth.

6. In a labeling-machine the combination 35 of a support for the object to be labeled, a plurality of belt-wheels, belts connecting said wheels together in pairs and having lugs extending above said support for advancing the object to be labeled therealong, one wheel of 40 one of said pairs being rotatably adjustable relatively to the other wheels, means for applying a label to the object to be labeled while held between said lugs, a power-transmitting means for imparting intermittent ro-45 tation to said wheels, and means adjustably connecting part of said power-transmitting means with said wheels, substantially as set forth.

7. In a labeling-machine the combination 50 of a support for the object to be labeled, means for advancing said object along said support with an intermittent movement, a paste-receptacle arranged to one side of the line of movement of said object, a paste-pad, 55 upper and lower normally parallel crankarms connected with said pad for the moving or throwing over said pad transversely of the support across the advancing means from said paste-receptacle to the object to be labeled 60 over said support, and means for oscillating said arms alternately in opposite directions, substantially as set forth.

8. In a labeling-machine the combination of a support for the object to be labeled, a 65 paste-receptacle arranged to one side of said support, a paste-pad for applying paste to the I substantially as set forth.

object to be labeled while on said support, lower and upper parallel crank-arms pivotally connected to said pad, and means for oscillating said crank-arms alternately in oppo- 70 site directions transversely of the support for first causing the pad to approach the pastereceptacle and then contact with the object to be labeled upon said support, substantially as set forth.

9. In a labeling-machine the combination of a support for the object to be labeled, a paste-receptacle arranged to one side of said support, a paste-pad for conveying paste from said receptacle to the object to be labeled on 80 said support, lower and upper parallel crankarms upon which said pad is yieldingly supported and means for oscillating said crankarms alternately in opposite directions to cause said pad to move from the paste-recep-85 tacle transversely of the support to the object to be labeled upon said support, substantially as set forth.

10. In a labeling-machine the combination of a support for the object to be labeled, a 90 paste-receptacle arranged to one side of said support, parallel crank - arms, a paste - pad having stems connected with said crank-arms, a spring having abutment against said pad and one of said arms for imparting the pres- 95 sure of said arm to the pad and means for oscillating said arms horizontally in opposite directions from the paste-receptacle transversely of and to said support and vice versa, substantially as set forth.

11. In a labeling-machine the combination of a support for the object to be labeled, a vertically-movable paste-receptacle, a relatively fixed paste-grid located therein and means for conveying the paste from said grid 105 to the object to be labeled upon said support,

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substantially as set forth.

12. In a labeling-machine the combination of a support for the object to be labeled, a vertically-movable paste-receptacle, a rela- 110 tively fixed paste-grid arranged therein, means for conveying the paste from said grid to the object to be labeled upon said support and means operatively connecting the lastsaid means with said paste-receptacle for 115 causing them to operate in time with relation to each other, substantially as set forth.

13. In a labeling-machine the combination of a pair of cranks, a pin connecting said cranks, a plurality of pads journaled upon 120 said pin, for respectively applying the paste and a label to two objects to be labeled, simultaneously, a support for holding a plurality of the objects to be labeled under said pads, means for oscillating said cranks alter- 125 nately in opposite directions, means arranged to one side of said support for applying paste to one of said pads, a label-holder arranged to one side of said support in the line of movement of the other of said pads and means for 130 causing a label to adhere to the latter pad,

14. In a labeling-machine the combination of a label box or holder, scrapers arranged contiguous to the edge of said box or holder for engaging the edges of the labels as they rise 5 therefrom, means for applying paste to the object to be labeled and a label-carrier having an air-exhausting device and provided with a hollow perforated pad adapted to engage the labels in said holder for conveying to them therefrom to the object to be labeled,

substantially as set forth.

15. In a labeling-machine the combination of a support for the object to be labeled, a label-holder, a hollow label-carrying pad hav-15 ing a hollow stem, a pair of parallel crankarms pivotally connected with said stem, means for oscillating said crank-arms alternately in opposite directions transversely of the support for carrying said pad from said 20 label-holder to said support and vice versa, an air-exhauster and a flexible connection be-

tween said exhauster and said hollow stem, substantially as set forth.

16. In a labeling-machine the combination 25 of three pads for respectively applying paste to the object to be labeled, applying the label to the pasted surface of said object and pressing the label against the said object after it is applied, parallel crank-arms pivotally con-30 nected with the first two of said pads, means for oscillating said crank-arms alternately in opposite directions, a cushioned support for the third one of said pads and means connected with one of said crank-arms for de- |

pressing said third pad, substantially as set 35 forth.

17. In a labeling-machine the combination of a label-holder, a follower in said holder for supporting the labels therein, a support for the object to be labeled, means for intermit- 40 tently advancing said object along said support, an operating-lever for imparting motion to said means, a ratchet-wheel, means operatively connecting said wheel with said follower, a pawl for rotating said wheel, means 45 adjustably connecting said pawl with said operating-lever, and means for transferring the label from the holder across the support to the object to be labeled, substantially as set forth.

18. In a labeling-machine the combination of a plurality of belt-wheels, belts connecting said wheels together in pairs and having lugs arranged quincuncially or staggered for engaging and advancing the object to be labeled, 55 a notched wheel operatively connected with said belt-wheels, an oscillatory dog for engaging the notches of said wheel and imparting an intermittent rotation thereto, a stop for limiting the throw of said dog, means for os- 60 cillating said dog, and means for applying the label to the object to be labeled while held between said lugs, substantially as set forth.

EDDY T. McKAIG.

Witnesses:

F. A. HOPKINS, W. D. Cross.