

P. S. SMITH.
 LABELING MACHINE.
 APPLICATION FILED JULY 30, 1909.

1,035,914.

Patented Aug. 20, 1912.
 7 SHEETS—SHEET 1.

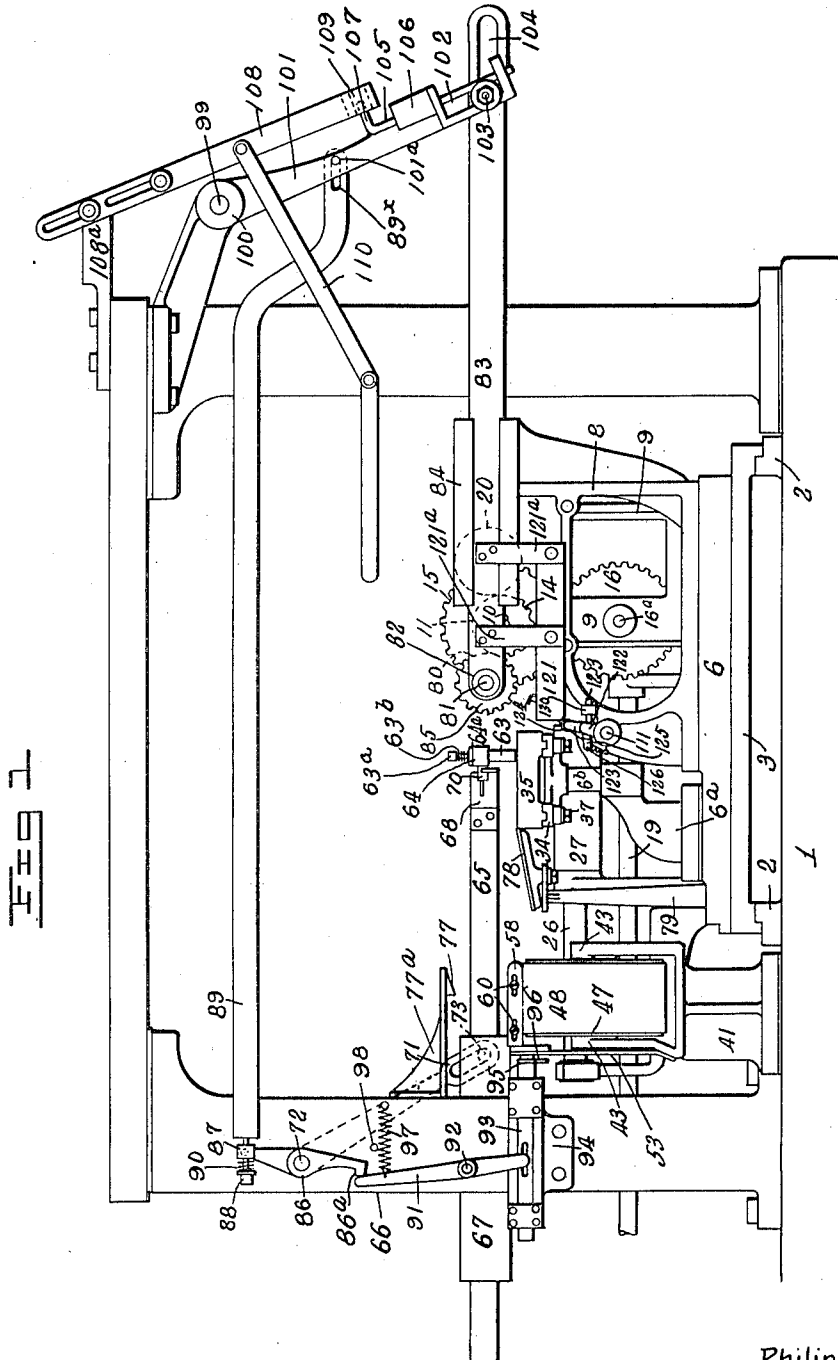


FIG 1

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Witnesses
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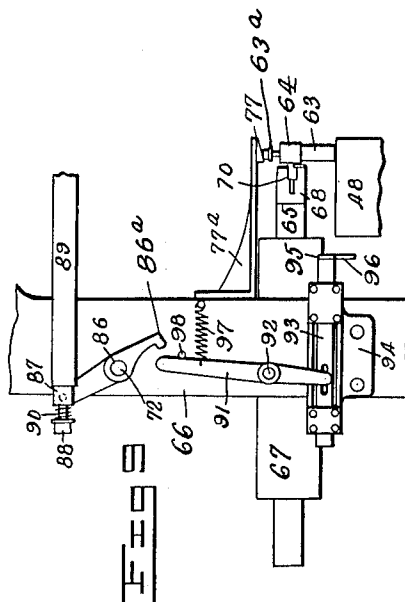
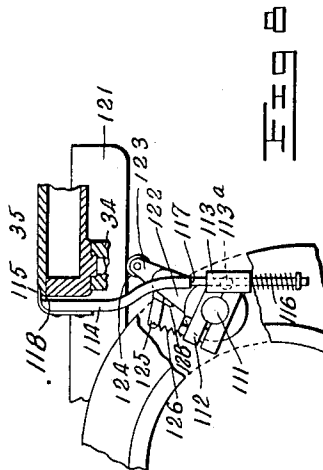
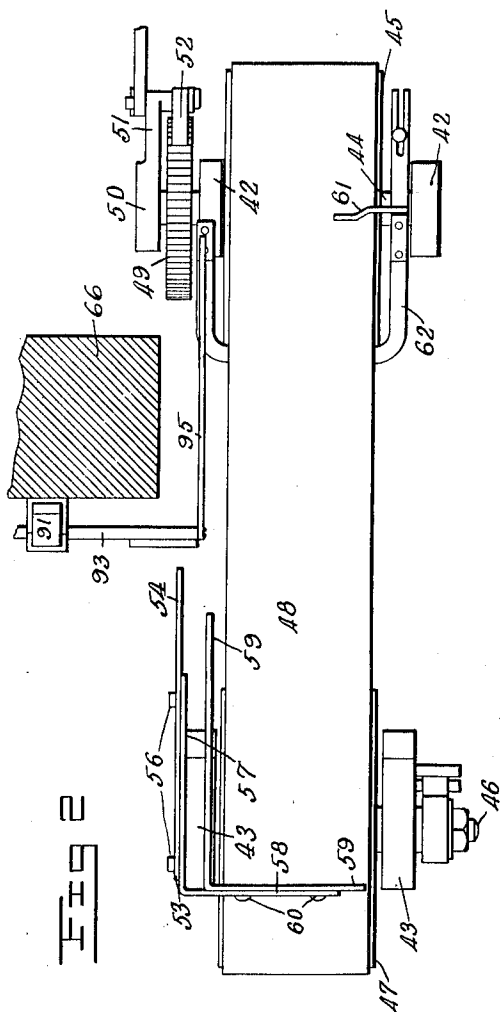
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7 SHEETS—SHEET 2.



Witnesses
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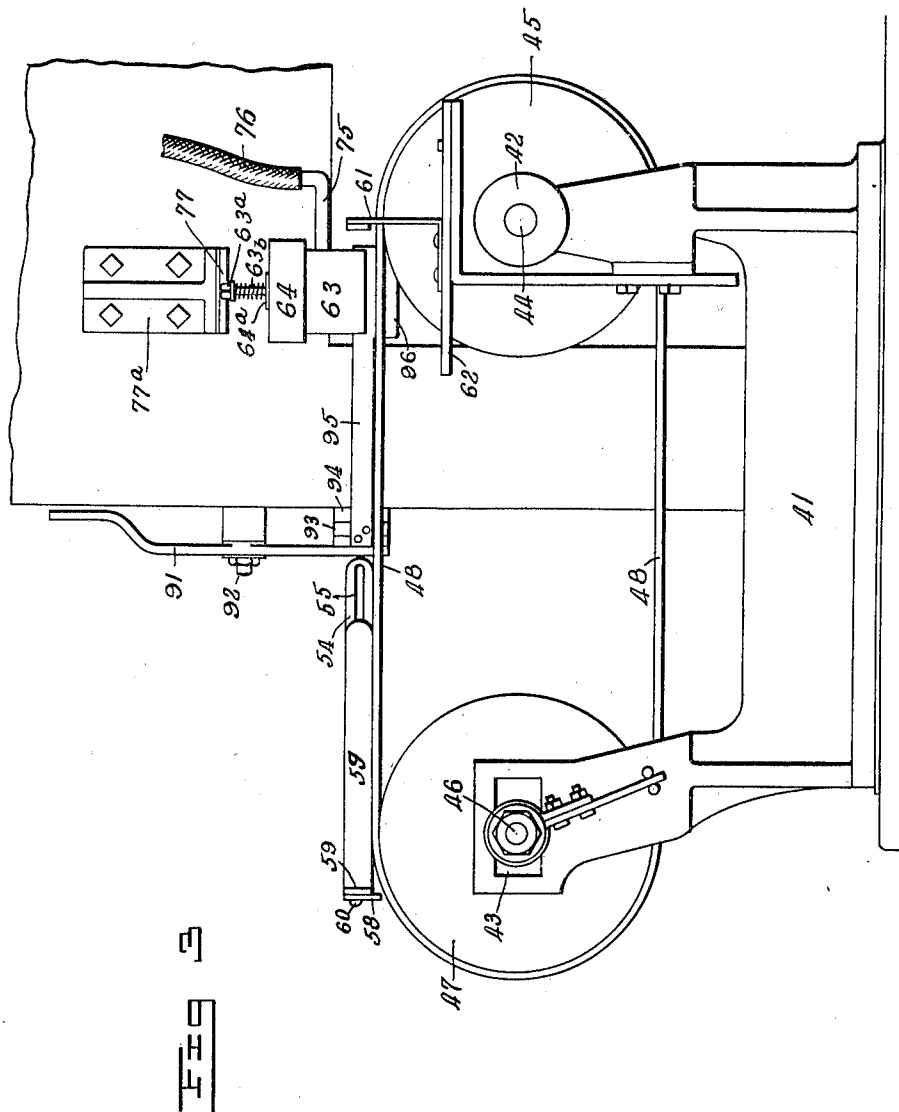
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7 SHEETS—SHEET 3.



Witnesses
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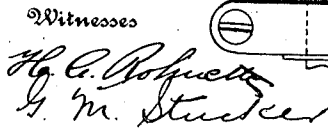
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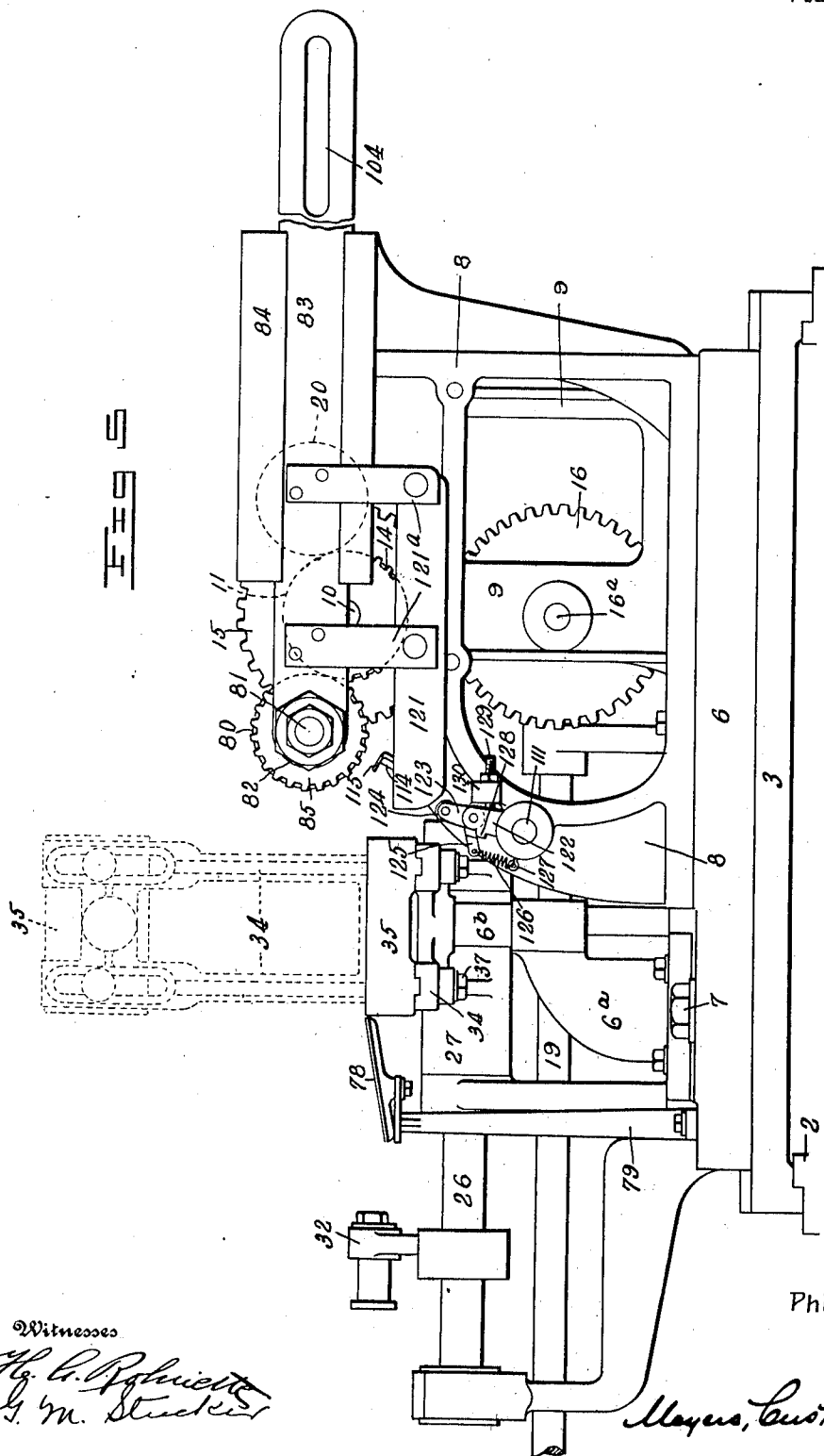
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7 SHEETS—SHEET 5.



Witnesses
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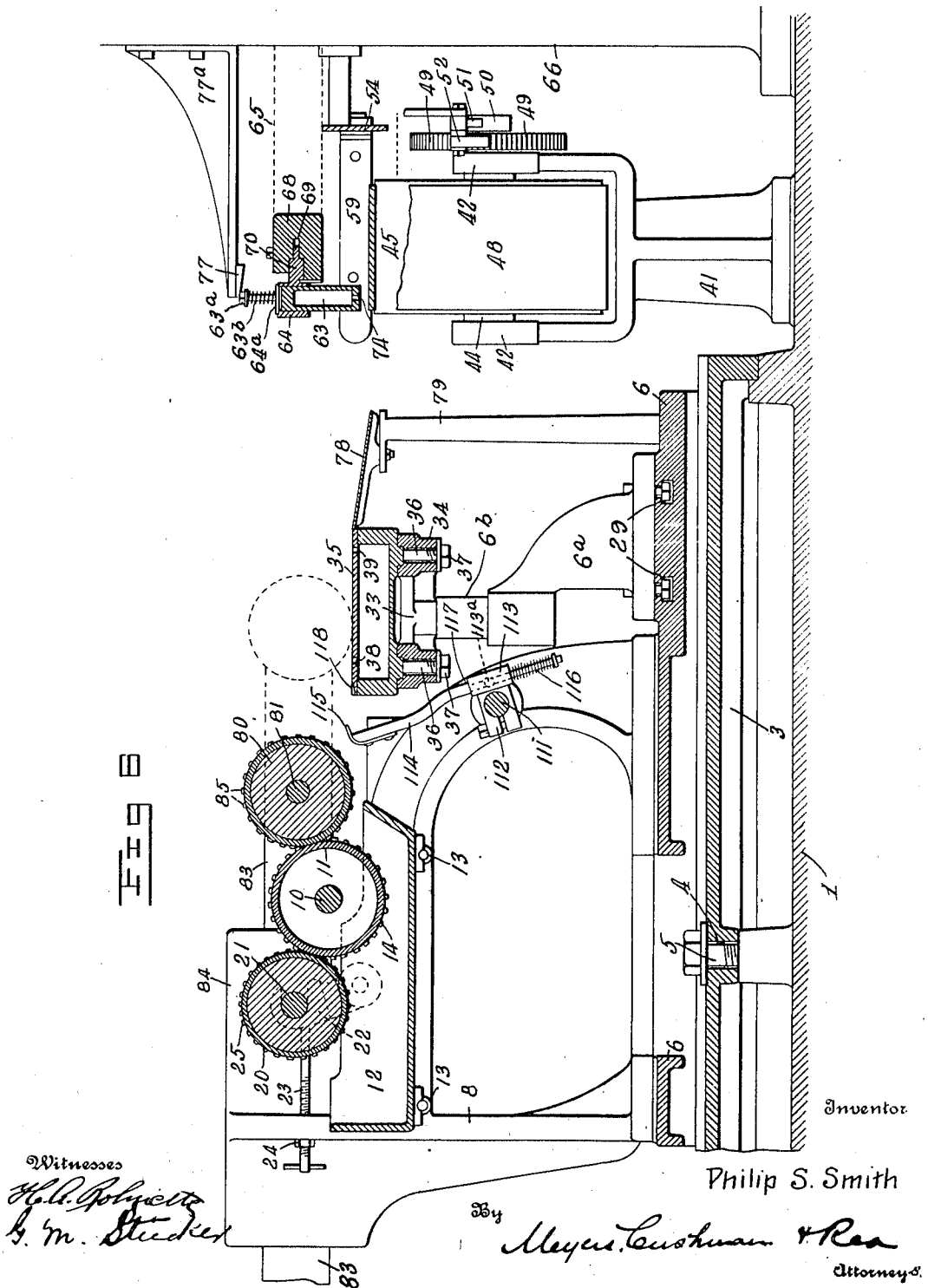
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7 SHEETS—SHEET 6.

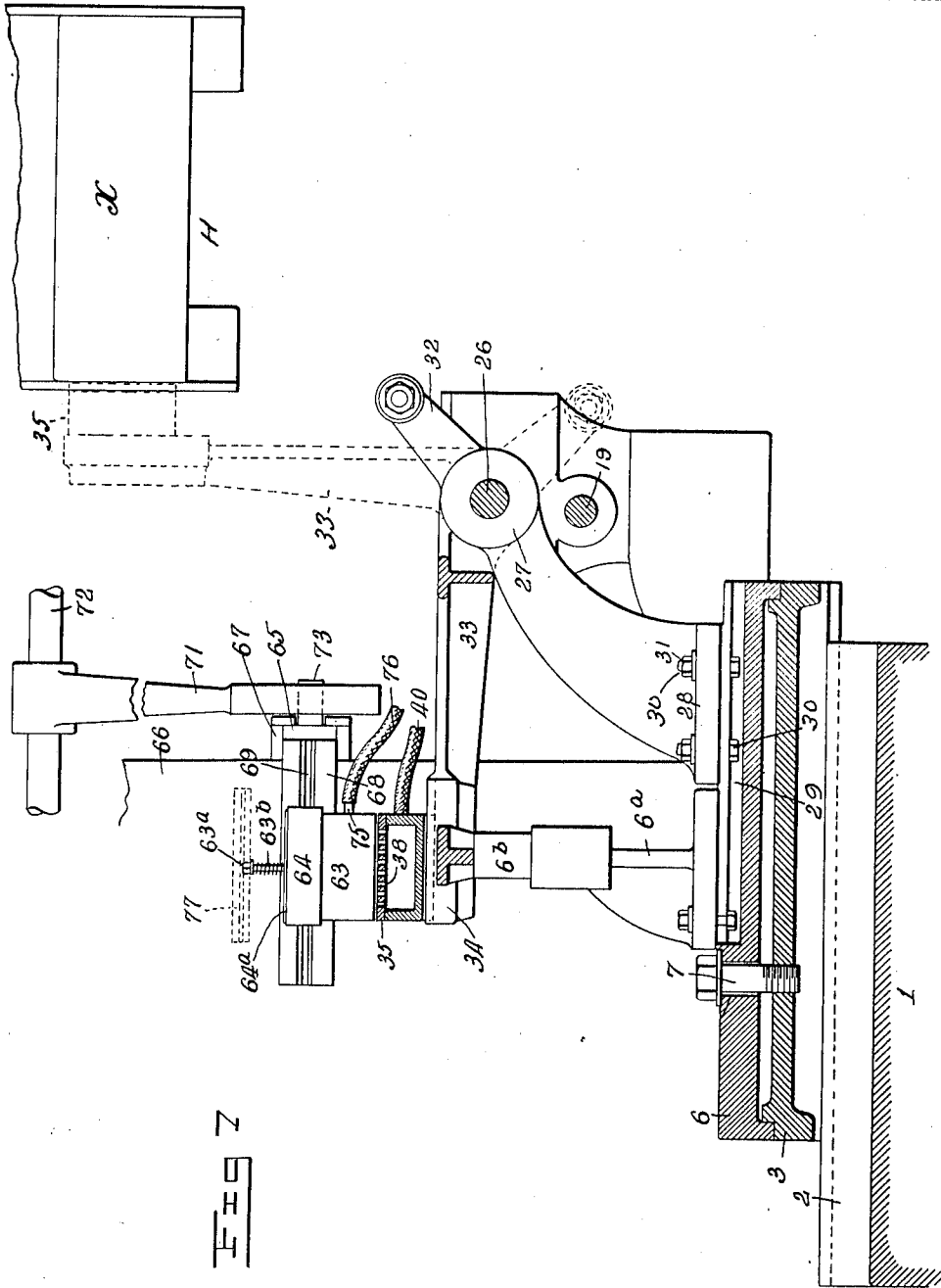


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7 SHEETS—SHEET 7.



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UNITED STATES PATENT OFFICE.

PHILIP S. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

LABELING-MACHINE.

1,035,914.

Specification of Letters Patent.

Patented Aug. 20, 1912.

Application filed July 30, 1909. Serial No. 510,453.

To all whom it may concern:

Be it known that I, PHILIP S. SMITH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Labeling-Machines, of which the following is a specification.

This invention relates to a labeling machine, and has for its main object to provide a simple and efficient machine comprising an apparatus for picking up labels from a feeding mechanism, one at a time, by means of suction, transporting each of said labels to an applying device on which it is held by suction while the reverse side thereof is being coated with an adhesive material, and afterward moving the applying device to affix the label on a package.

Another object of the invention pertains to the label feeding mechanism which carries the labels placed thereon to a registering or adjusting mechanism that alines each successive label in correct relation with the applying device before it is picked up by the label transporting apparatus.

A further object of the invention refers to a mechanical means for clamping labels on the label applying device while being coated with an adhesive material.

With these and other objects in view the invention consists in the novel construction, combination and arrangement of parts hereinafter described, claimed, and illustrated in the accompanying drawings forming a part of this specification in which,

Figure 1 is a side elevation of the label affixing machine as a whole; Fig. 2, a plan view of the label feeding mechanism; Fig. 3, an elevation of the label feeding mechanism viewed at a right angle to Fig. 1; Fig. 4, a plan view of the affixing device and the mechanism for applying an adhesive substance on the reverse side of a label; Fig. 5, a side elevation of the same; Fig. 6, a longitudinal sectional view on the line 6—6 of Fig. 4; Fig. 7, a transverse sectional view on the line 7—7 of the same figure; Fig. 8, a detail view of the mechanical label holding device, a part of the supporting frame being broken away, and Fig. 9, a detail view of the registering or adjusting device in position opposite that shown in Fig. 1.

In the drawings, 1 indicates a support of any suitable kind, as for instance the bed of a package wrapping or other machine

through which packages to be labeled are designed to pass. Mounted to slide transversely on guides or ways 2 on the support 1 is a movable base plate 3, provided with a slot 4 through which a bolt 5 passes and screws into the support 1 for the purpose of holding said base plate after adjustment. A second plate 6, parallel to the base plate 3 and movable thereon is adjustable in direction at a right angle to that of the base plate, and is fixed to said base plate by a bolt 7 passing through a slot in the plate 6 and threaded into the base plate. By means of this arrangement the label applying means and the gluing apparatus on the plate 6 may be accurately adjusted to suit packages of various sizes, and to different positions thereon for the attachment of labels.

Firmly secured on the top of the plate 6 at each side thereof is an upright frame, that on the front indicated by 8 and on the rear side by the numeral 9. These frames 8 and 9 are provided with fixed bearings for the transverse shaft 10 of a glue roll 11 rotatable in a glue pan or reservoir 12 situated below said roll and removably supported on pins 13 projecting inwardly from the side frames 8 and 9.

Throughout this specification, glue will be mentioned as the adhesive substance employed for coating the reverse side of the label, but paste mucilage, or other like material may be substituted for glue if desired.

Keyed or otherwise fixed on one end of the transverse shaft 10 is a gear wheel 14, a larger gear wheel 15 is fastened on the opposite end of the same shaft and meshes with a like gear wheel 16 on a shaft 16^a. The shaft 16^a may be fixed in the side frame 9, in which case the gear wheel 16 will rotate thereon. Mounted on the same shaft 16^a and rotating with the gear wheel 16 is a bevel gear wheel 17 in engagement with a similar bevel gear wheel 18 fast on a shaft 19, continuously driven by power, not shown. If desired, power may be applied directly to the gear wheel 15, or its shaft 10.

At one side of the glue roll 11 is a doctor roll 20 for evenly distributing glue over the glue roll and removing the excess, mounted on a shaft 21 parallel to the shaft 10 and supported at its ends in swinging bearings 22 pivoted on the frame. The bearings 22 are provided with slots for the shaft 21 which permits the removal of the doctor roll when desired. Rods 23 threaded into the

side frames 8, 9, have their inner ends in contact with the swinging bearings 22 to press the doctor roll 20 against the glue roll with greater or less force as the rods are turned. The outer ends of the threaded rods 23 have suitable means thereon for turning them, and if desired lock nuts 24 may also be employed to prevent the rods rotating unintentionally. A gear wheel 25 on the shaft 21 of the doctor roll is in mesh with the gear wheel 14 by means of which the doctor roll is rotated.

A shaft 26, parallel with the shaft 19, is journaled in bearings 27 carried by bracket arms projecting from a plate 28 slidable on the plate 6, in which latter plate are formed transverse undercut slots 29 to engage the heads of bolts 30, projecting upwardly through the bracket plate 28 to receive nuts 31 which are loosened when the shaft 26 is to be adjusted laterally. Fixed on the shaft 26 is an arm 32 to which power is applied for rocking the shaft. A second arm 33, also secured on the rocking shaft 26 projects forwardly and is preferably divided at its end into two parallel fingers 34 slotted at their outer ends, on which fingers is adjustably fastened a platen 35 for carrying the labels to and affixing them on the packages.

The platen 35 in its preferred form, comprises a hollow box like structure provided with threaded bolts 36 on its under side which pass through the slots in the fingers 34 and receive nuts 37, the loosening of which permits the platen to be adjusted on said fingers in line therewith. The top or upper surface of the platen 35 is preferably flat and lies normally in a horizontal plane to receive the labels, and has formed there-through a number of perforations 38 and 39 at opposite ends, which perforations communicate with the interior of the platen. A projecting nipple on one side of the platen 35 also communicates with the interior thereof, and has a flexible tube 40 attached thereto which leads to a suction device of any desired type, so that as air in the platen is exhausted there will be an inrush of outside air through the holes 38 and 39. Under these conditions, if a label be placed on the platen 35, the partial vacuum produced therein by closing the holes will cause the label to adhere to the platen until the suction is cut off.

A bracket 6^a is adjustably fastened on the plate 6 by means of bolts inserted in the undercut grooves 29. An upwardly extending portion of said bracket carries a stop or rest 6^b for the outer end of the arm 33 immediately below the platen to support the latter and hold it firmly in position while the label is being coated with glue.

Turning next to the mechanism for feeding labels to the platen 35, attention is directed to a frame 41, bolted on the support

1 at a right angle to the frames 8, 9, at a suitable distance from the platen and provided with fixed bearings 42, at one end and adjustable bearings 43 at the opposite end. Mounted to turn in the fixed bearings 42 is a horizontal shaft 44 carrying a pulley or drum 45; a similar shaft 46 and pulley 47 are supported in the adjustable bearings 43. An endless belt 48 of any desired length passes around the pulleys or drums 45 and 47 and is driven by one of them for advancing the labels placed on the belt toward the device for transporting said labels to the platen 35. Any suitable means may be employed for driving the drums 45, 47 and the endless belt 48, one such means being shown in the drawings for imparting an intermittent movement thereto. The means referred to comprise a ratchet wheel 49 fixed on one of the shafts, preferably the shaft 44; a collar 50 loose on the shaft and from which projects an arm 51, and a pawl 52 on said arm in engagement with the ratchet wheel. The pawl and ratchet intermittently move the endless belt in one direction when the arm 51 is operated by any suitable means, not shown.

A right angled support 53 is fastened on the frame 41 adjacent one of the adjustable bearings 43 and extends upwardly therefrom with its horizontal arm 54 parallel to that edge of the endless belt 48 farthest from the platen 35, and a short distance therefrom. Horizontal slots 55 are formed in said horizontal arm through which slots pass screws 56 into an adjusting plate 57 for fastening said plate to said arm. A finger 58 extends from the adjusting plate 57, perpendicular thereto across the endless belt and serves as a support for a right angled guide strip 59 attached to said finger by screws 60 extending through slots therein and into the guide strip 59. The guide strip 59 serves as an abutment for one side and one end of the labels when they are placed on the endless belt. Adjustment in the direction of movement of said belt is obtained by means of the screws 56 when loosened in the slot 55 of the horizontal arm 54, and by loosening the screws 60, transverse adjustment of the guide strip is provided. The drum 47 is preferably placed outside the wrapping or other machine to enable the labels to be placed on the belt with greater convenience. During the pause between each intermittent movement of the endless belt 48, a label is placed thereon against the two sides of the guide strip 59 and advances a certain distance at the next movement of said belt, after which another label is placed thereon. The labels on the belt advance step by step until the foremost one strikes the stop fingers 61 on a yoke 62 adjustably mounted on the frame 41 near the fixed bearing 42. In this position the

label is immediately beneath the transporting device.

The transporting device comprises a hollow suction head 63 arranged to be moved vertically in a carrier frame 64 on the end of a horizontally sliding rod 65. Screwed into the top of the suction head 63 is a bolt or pin 63^a extending upwardly through a plate 64^a resting on the top of the carrier frame 64. Surrounding the bolt or pin 63^a is a spring 63^b which normally holds the suction head above the endless belt, but when pressure is applied to the end of the bolt or pin, the spring is compressed and the suction head lowers until it is brought substantially in contact with the endless belt 48.

Secured on a suitable standard or other support 66 is a horizontal guide way 67 for the sliding rod 65 on one end of which is a head block 68 integral with or attached thereto at a right angle and formed with a slot 69 in its outer face to receive therein a lug 70 of similar shape projecting from the rear of the carrier frame 64 and securely bolted together. If preferred the head block 68 and the carrier frame 64 may be made in one piece. The suction head is moved from the endless belt 48 to the platen 35 and back again by means of an arm 71 fixed on a rock-shaft 72, the free end of the arm being slotted to receive a pin 73 projecting from the sliding rod 65.

After a label has traveled with the belt until it strikes the stop fingers 61 and been arrested thereby in line with the platen 35, it is adjusted laterally on the endless belt by means hereinafter described. The label is then picked up by the suction head at the proper time in the following manner. The suction head 63 is hollow, as heretofore stated, and has a number of small holes 74 in its under face and a nipple 75 projecting from one end of its sides on which a flexible tube 76, leading to a suction apparatus of any desired type, is fastened. As with the platen 35, the exhaustion of the suction head causes an inflow of air through the small holes 74, which when brought close to a label, the latter will naturally cling to the bottom of the suction head. For a greater part of the time the suction head is in its elevated position above the endless belt, but as it reaches the belt near the end of its movement away from the platen, the head of the bolt or pin 63^a strikes a fixed cam plate 77 on the end of a bracket 77^a bolted to the standard 66 and is depressed, forcing the suction head 63 down to the belt immediately over the label which rests thereon. The label is drawn against the suction head by the air entering through the holes 74 and adheres thereto so long as the suction is kept up, that is until the suction head has carried the label to and above the platen

35 its limit of movement. The exhaust through the suction head 63, is then cut off and the suction through the platen is turned on, causing the label to adhere to the platen. The suction head immediately returns for another label and the operation is repeated.

The working faces of the suction head 63 when elevated and of the platen 35 in its initial position, lie in parallel planes quite close together so that the label, when brought over the platen will lie flat on the latter and displacement of said label be prevented when the suction is changed from the suction head to the platen. The rear end of the label hangs down from the suction head when the latter is advancing toward the platen, so as to prevent the label from being drawn off the suction head or having its position changed by striking the end of the platen, an inclined plate 78, supported on a post 79 is placed at said end of the platen, the lower end of said inclined plate being low enough to permit the label moving thereover with ease.

After the suction head has delivered a label to the platen and is returning for another, a glue applying roll 80 is moved toward the platen 35 from its opposite side and covers the reverse of the label with a smooth and even coat of glue. The glue applying roll 80 is fixed on a shaft 81 rotatable in a bearing 82 on the end of a horizontal sliding bar 83 extending beyond the machine in a direction opposite the label feeding device. The sliding bar 83 is mounted in a channeled guide 84 on the top of the side frame 8, and is provided with means hereinafter described, for moving it endwise to carry the glue applying roll 80 from the glue roll 11 with which it is in contact, over the platen 35 and some distance beyond. A gear wheel 85 on the shaft 81 engages the gear wheel 14 and rotates the glue applying roll when in contact with the glue roll 11.

If a label about to be picked up by the suction head be not in correct register with relation to the platen, it cannot be thoroughly glued nor properly affixed on the box or carton. Means therefore are provided for adjusting each label on the endless belt before it is picked up. The lateral adjustment is obtained by the stop fingers 61 arresting the labels as heretofore described. The longitudinal adjustment is provided for by means of a registering mechanism which is adapted to move the labels transversely of the endless belt but longitudinally with respect to the platen.

Fulcrumed between its ends on the shaft 72 is a lever 86 free to rock on said shaft. The upper arm of the lever has a block 87 pivoted on its end and perforated for a pin or bolt 88 on one extremity of a rod 89 extending therefrom in the same direction as

the sliding rod 83. The pin or bolt 88 projects beyond the block 87 and is provided with a head, between which and the block is placed a coil spring 90 surrounding the pin to hold the end of the rod 89 in yielding contact with the block. When the lever 86 is rocked by the rod, 89, its lower arm strikes the upper end of a lever 91 and rocks it on its fulcrum 92 between its ends, the lower end being adjustably connected to a sliding bolt 93 movable to and from the endless belt 48 in a guide 94 fastened to some fixed object as the standard 66. The forward end or the end of the sliding bolt 93 near the endless belt 48 has fastened thereto a strip 95 that extends rearwardly of the machine parallel to the edge of the endless belt and may have a depending portion 96 thereon opposite the suction head.

When the rod 89 rocks the lever 86, the lower end of said lever, which may have a lug 86^a thereon, strikes the lever 91 and oscillates the latter for the purpose of sliding the bolt 93 toward the endless belt, carrying the strip 95 with it which, if the label projects too far beyond the edge of the belt, pushes it toward the platen. The parts are so adjusted that the throw or movement of the bolt 93 is just enough to place the label in correct position with relation to the platen 35. A reverse movement of the rod 89 returns the lever 86 to normal position, but the lever 91, sliding bolt 93 and strip 95 are restored to position by a spring 97.

A pin 98 limits the return movement of the lever 91 and consequently the sliding bolt and the strip 95.

Above the outer end of the sliding bar 83 is a transverse shaft 99 mounted to rock in bearings 100 bolted to a rigid support. Fixed on said shaft and to rock therewith is a downwardly projecting arm 101 having a recess 102 in one side near its lower end for a pin 103 fastened in a longitudinal slot 104 formed in the end of the sliding bar 83. The pin 103 may be adjusted in the slot 104 to vary the position of the glue applying roll with relation to the platen, and fits freely in the recess 102 to permit it to slide therein as the arm 101 is rocked. The recess 102 is open on one side so that the sliding bar 93 can be quickly disconnected from the rocking arm 101 and remain at rest, but to prevent said disconnection, a sliding bolt 105 is provided which passes through a housing 106 on the rocking arm and outside the pin 103 thereby inclosing the same in the recess now converted into a slot. The locking bolt 105 has its upper end bent outwardly to form a handle 107 by means of which the bolt may be raised to release the pin. Manual or mechanical means may be used to raise the bolt, one form of mechanical means being shown in the drawings and it comprises a bar 108 slidably mounted

on a rigid bracket 108^a with laterally projecting fingers 109 on said bar, between which the handle 107 of the bolt 105 passes, when the arm 101 swings to the right, see Fig. 1. Now, by raising the bar 108 the bolt 105 will be lifted and the pin 103 released. A lever 110, connected at one end to the bar 108 and having its other end shaped as a handle will serve to operate said bar. Projecting from one side of the arm 101 is a pin 101^a which enters a horizontal slot 89^x in the end of the rod 89 opposite the end provided with the pin or bolt 88. The pin 101^a has a limited free movement in the slot 89^x before it operates the rod 89 to swing the lever 86 and through the means described, move the strip 95.

The suction through the holes 38 in the platen 35 may not at times be sufficient to prevent the label from adhering to the glue applying roll 80. To overcome this difficulty a mechanical device for holding the extreme end of the label on the platen has been provided. A horizontal shaft 111 is mounted to rock in suitable bearings on the plate 6 and extends partly across the machine below the platen 35. Near the inner end of said shaft and adjustably fastened thereon are two clamp blocks 112 on each of which is pivoted a sleeve 113 provided with a lateral stud 113^a passing through a perforation in said clamp block. Slidably fitted in each sleeve 113 is a finger 114 having on its upper end a clamping tongue 115 projecting a short distance beyond the finger in the direction of the platen. The opposite ends of the fingers pass through the sleeves 113 and extend some distance beyond them. Surrounding each finger 114 below the sleeve 113 is a coil spring 116 one end bearing against the bottom of the sleeve and the other end against a washer and pin, nut or other stop on the end of the finger. The tension of the springs holds the shoulders 117 of the fingers close against the top faces of the sleeves under normal condition, but when the shaft 111 is rocked toward the platen the tongues 115 on the fingers 114 pass above said platen and the label thereon until said fingers strike the end of the platen. Continued movement of the shaft 111 draws the fingers downward in a straight line, because of the pivotal connection between the sleeves 113 and the clamp blocks 112, until the tongues 115 press the extreme edge of the label against the platen 35, or into the slight indentations 118 formed therein. Further movement of the shaft 111 compresses the springs 116 thereby causing the tongues 115 to bear firmly on the label.

The fingers 114 are normally held away from the platen 35 by a coil spring 119 surrounding the shaft 111 near its outer end, one end of said spring being fastened to the frame 8 and the other end to a collar 120

adjustably secured on the shaft. The movement of the shaft 111 is caused by a cam plate 121 below the sliding bar 83, and fastened thereto by brackets 121^a at its inner end which carries the glue applying roll.

Secured on the outer end of the shaft 111 below the cam plate 121 is an upwardly extending lug 122 on which is pivoted an elbow lever 123. One arm of said lever lying normally in line with said lug in position to be acted on by the cam plate 121, preferably carries a small roller 124 on its outer end. The other arm 125 of the elbow lever has a spring 126 fastened on its end and to a pin 127 on the frame 8 for holding said arm in contact with a stop 128 on the lug 122. The movement of the shaft 111 under the influence of the spring 119 is limited by an adjustable stop 129 screwed into a boss 130 on the outside of the frame 8, against which stop the lug 122 rests. The cam plate 121 is of such length that after the gluing roll has passed over the label and coated the back of the same, it will pass off the roller 124 and permit the fingers 114, under the influence of the spring 119, to return to their initial positions thereby withdrawing the clamping tongues 115 from the platen 35 and permitting the latter to rise with the label and affix the same to a package.

It is to be understood that while the working face of the platen is preferably a plane surface, it may be convex, concave, or of other form provided it is capable of receiving a label and holding the same while an adhesive is applied thereto. The platen may also be arranged to move in a straight line to affix the label instead of an arc as in the present instance, thus enabling a label to be attached to the underside of a package.

There are various ways of using this invention, one of which is to secure it on the bed of a machine for wrapping cartons or boxes filled with merchandise and couple the moving parts with those of the wrapping machine. The labeling machine must be in such relation to the throat H or other outlet for the wrapped packages that the platen 35 can be moved into position to place a label on the desired side of the package or box.

Let it be assumed that the labeling machine is in place, and the driving mechanism set in operation. A label, face downward, is placed on the endless belt 48 while it is stationary and against the guide strip 59, and at the proper time, the endless belt is advanced a predetermined distance and then pauses. Another label is placed on the belt in the same manner and the operation repeated as long as necessary. This step by step movement will finally bring the labels on the endless belt in succession against the stop fingers 61, which will arrest their travel opposite the registering or adjusting strip 95. The shaft 99 about this time is rocked so

as to swing the arm 101 from the position shown in Fig. 9 to that represented in Fig. 1. This movement of the arm 101 causes the adjusting strip 95, through the connections described, to travel in the direction of the endless belt and move the label if necessary, into accurate position. The return movement of the suction head 63 carries it under the cam plate 77 which depresses it nearly or quite into contact with the label at one end, and by means of the suction passing through said suction head, the label is caused to adhere thereto. The suction head is then moved toward the platen 35, over which it passes sufficiently far to lay the entire label thereon, whereupon the suction is changed from the suction head to the platen, thereby releasing the label from the suction head that it may adhere firmly to said platen. The platen 35 is, of course in its lower or horizontal position, and as the suction head retreats, the glue applying roll 80 is advanced by the return movement of the arm 101 and coats the reverse of the label with glue, first however operating the fingers 114 to clamp the extreme edge of the label against the face of the platen. Further movement of the arm 101 moves the bar 89 which then rocks the lever 86 and permits the return of the registering or adjusting parts to the position indicated in Fig. 9. After the glue applying roll has passed entirely over the platen and while it continues to move in the same direction, the platen is elevated (see dotted lines, Figs. 5 and 7) into contact with a wrapped box or carton X supported in the throat H of the wrapping or other machine on which it is attached, and affixes the label to said box. The platen and glue applying roll then return to position to receive and glue the next label. The suction through the platen is cut off as soon as the label is affixed to the box.

I claim—

1. In a labeling machine, a label feed belt, a label affixing device, means for lifting a label from the label feed belt and transporting it to the affixing device, and means for moving said affixing device to carry a label and apply the same on an object.

2. In a labeling machine, a label feed belt, a label affixing device, means for lifting a label from said label feed belt and transporting it to said affixing device and suction means for retaining said label on said affixing device.

3. In a labeling machine, a label feed belt, a label affixing device, means for transporting a label from said label feed to said affixing device, suction means applied to said transporting device for retaining the label in contact therewith, and a suction means for retaining a label on the affixing device.

4. In a label machine, a label feed, a labeling affixing device arranged to hold a label

by suction, means for transporting a label from said label feed to said affixing device, means for applying glue to a label, and mechanical means for clamping one end of said label against the affixing device.

5 5. In a labeling machine, an intermittent label feed, a swinging label affixing device adapted to hold a label thereon by suction, and means for transporting a label
10 retained in contact therewith by suction from the intermittent label feed to the affixing device.

6. In a labeling machine, a label feed, a label affixing device, means for transporting
15 a label from the label feed to the affixing device, and means cooperating with the label feed for registering said label with relation to said affixing device and said transporting means.

20 7. In a labeling machine, an intermittently movable label feed, a movable label affixing device, means for transporting a label from the intermittent feed to the affixing device, suction means in connection with
25 the affixing device and the transporting means for holding labels in place on said parts, an adjustable stop for indicating the initial position of a label on the label feed, and a registering mechanism for positioning
30 a label with relation to the affixing device.

8. In a labeling machine, a label feed, a movable label affixing device, means for transporting said label from the label feed to the affixing device, means for holding the
35 label on the affixing device, a gluing apparatus, and a movable glue applying roll adapted to coat the label with glue.

9. In a labeling machine, a label feed therefor comprising an endless belt adapted
40 to carry thereon a plurality of labels, means for operating said belt, a stop to guide the placing of labels on said belt, and registering means for successively adjusting each label on the belt.

45 10. In a labeling machine, a label feed therefor comprising an endless belt adapted to carry thereon a plurality of labels, means for intermittently moving said endless belt, an adjustable stop to guide the placing of
50 labels on said belt, an adjustable stop for arresting a label in a predetermined position, and registering means for successively adjusting each label transversely on the belt.

55 11. In a labeling machine, a label feed therefor comprising an endless belt adapted to carry thereon a number of spaced individual labels, means for intermittently moving said endless belt, a stop having trans-
60 verse and longitudinal adjustment with relation to said belt to guide the placing of labels on said belt, a label affixing device, and means for adjusting a label on said belt in longitudinal and transverse relation to
65 said label affixing device.

12. In a labeling machine, a label feed comprising an endless belt, a movable label affixing device arranged to hold a label by suction, means for transporting a label
70 picked by suction from said belt to said affixing device and depositing it thereon, and means for applying glue to said label while on the affixing device and while the latter is stationary.

13. In a labeling machine, a label feed
75 comprising an endless belt, a movable label affixing device arranged to hold a label by suction, means for transporting a label picked by suction from said belt to said affixing device and depositing it thereon,
80 means for adjusting said label on said belt in proper relation to the affixing device and transporting means, and means for applying glue to said label while on the affixing device and while the latter is stationary.

14. In a labeling machine, an endless label feed belt, a movable label affixing device arranged to hold a label by suction, a label transporter comprising a suction head for
85 picking up a label by suction and depositing it on said affixing device, a movable carrier for said head, and means for depressing the suction head to pick up a label, and means for applying an adhesive to the label while
90 on the affixing device.

15. In a labeling machine, an endless belt label feed, means for intermittently moving the same, a movable label affixing device arranged to hold a label by suction, a label transporter comprising a rectilinearly mov-
100 able carrier, a suction head depressibly mounted in said carrier for picking up a label by suction from the belt and depositing it on said affixing device, and means for depressing said head, and an adhesive applying means for coating the label while on
105 the affixing device.

16. In a labeling machine, an intermittently movable endless belt label feed, and means for adjusting labels thereon, a mov-
110 able label affixing device arranged to hold labels by suction, a label transporter comprising a rectilinearly movable carrier, a suction head resiliently supported in said carrier, means for depressing said suction
115 head to pick up a label from the feed belt, and means for applying an adhesive to the label while on the affixing device.

17. In a labeling machine, an intermittently movable endless belt label feed, and
120 means for adjusting labels thereon, a movable label affixing device arranged to hold labels by suction, a label transporter comprising a rectilinearly movable bar, a suction head carried thereby and movable
125 transversely thereof for picking up labels one at a time from said feed belt, resilient means for supporting said suction head on said movable bar, and raising it above the labels, positive means for depressing the
130

suction head, and an adhesive applying mechanism.

18. In a labeling machine, a rock shaft, and means for operating said rock shaft, in combination with a traveling platen for applying a label to a package, a roll for coating a label on said platen with glue, an intermittent label carrier, registering mechanism for alining a label with said platen, transporting means for conveying said label from the carrier to the platen, an arm on said rock shaft for operating said glue roll and registering mechanism, and means for operating the label carrier and the platen.

19. In a labeling machine, a label feed belt, a label affixer, means for transporting labels from said feed belt to said affixer, means for adjusting labels on said belt in register with the label transporter and label affixer, a gluing roll adapted to be moved over labels on said label affixer, a rocking shaft, an arm on said shaft adapted to operate the gluing roll, and an operative connection between said arm and the label adjusting means.

20. In a labeling machine, a label feed belt, means for intermittently moving the same, a label affixer having a suction platen, suction means for transporting labels from said feed belt to said platen to be held thereon by suction, means for adjusting labels on said belt in register with the label transporting means, a gluing roll adapted to be moved over labels on said platen, a slide carrying said gluing roll, a rocking shaft, an arm on said shaft pivoted to said slide for moving the gluing roll, and an operative connection between said arm and the label adjusting means.

21. In a labeling machine, a label affixing device comprising a swinging arm divided at its end into fingers, a platen adjustably secured on said fingers and adapted to receive and retain thereon by suction a label, and means for swinging said arm for applying the label on a package.

22. In a labeling machine, a labeling affixing device comprising a swinging arm divided at its end into two fingers, a platen adjustably secured on said fingers and provided with inlet holes leading to an internal chamber in communication with a suction apparatus, a glue applying roll adapted to travel over said platen, a support for said platen, and means for swinging said arm.

23. In a labeling machine, a label affixer provided with a suction head having a perforated platen, means for placing a label on said platen to be held by suction, means for temporarily clamping one edge of the label against the platen, and gluing means for coating said label while temporarily clamped.

24. In a labeling machine, a label affixer

provided with a suction head having a perforated platen, means for placing a label on said platen to be held by suction, mechanical means for temporarily holding one edge of the label against the platen, a transversely inmovable glue applying device for coating said secured label, and means carried by said gluing device for operating the temporary label holding means.

25. In a labeling machine, a platen, means for temporarily holding one edge of a label upon the platen to be coated with glue, a transversely movable glue applying roll, and means moving in unison with said glue applying roll for operating the label edge holder while the label is being coated and to disengage the same after said gluing roll has passed over the label.

26. In a labeling mechanism, a label affixing device provided with a platen having an internal suction chamber with air inlet holes on one side, a finger adapted to be moved to and from said platen for temporarily clamping the edge of a label on said platen, and means for operating said finger.

27. In a labeling machine, a label affixing device provided with a platen, a rock shaft, a block adjustable on said shaft, a finger flexibly mounted on said adjustable block and arranged to bear on the platen when moved toward the same, positive means for operating said finger, and automatic means for returning the same to initial position.

28. In a labeling machine, a label affixing device provided with a platen for supporting a label, a rock shaft, an adjustable block on said shaft, a finger mounted to rock and move longitudinally on said block for holding one edge of said label against the platen, a label gluing roll carried by a longitudinally movable support, an arm on said rock shaft and means supported by said gluing roll support to engage said arm and rock said shaft.

29. In a labeling machine, a label clamp comprising a rock shaft, an adjustable block thereon, a sleeve pivoted on said block, a finger having a stop mounted to slide longitudinally at one end through said sleeve, and a spring tending to retain said finger stop against said sleeve, a tongue on the outer end of said finger for clamping a label, an arm on said shaft, means for intermittently operating said arm for rocking the shaft in one direction to move said fingers, and other means for returning the shaft to its initial position.

30. In a labeling machine, a label feed, means for adjusting labels thereon comprising a movable strip adapted to engage one edge of a label, a slide on which said strip is attached, means for operating said slide, a rock shaft, an arm thereon, and a rod con-

necting said arm to said slide operating means.

31. In a labeling machine, a label feed belt, a movable strip adapted to engage one
5 edge of a label carried by said label feed belt, a slide on which said strip is attached, means for operating said slide, a rock shaft, an arm on said rock shaft, a rod flexibly
10 connected to said arm and to said slide operating means, a glue applying roll, and a

slidable bar carrying said roll connected to said arm.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PHILIP S. SMITH.

Witnesses:

H. M. WHITMAN,
NAOMI SLOTTIE.
