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C. H. OHLSSON.

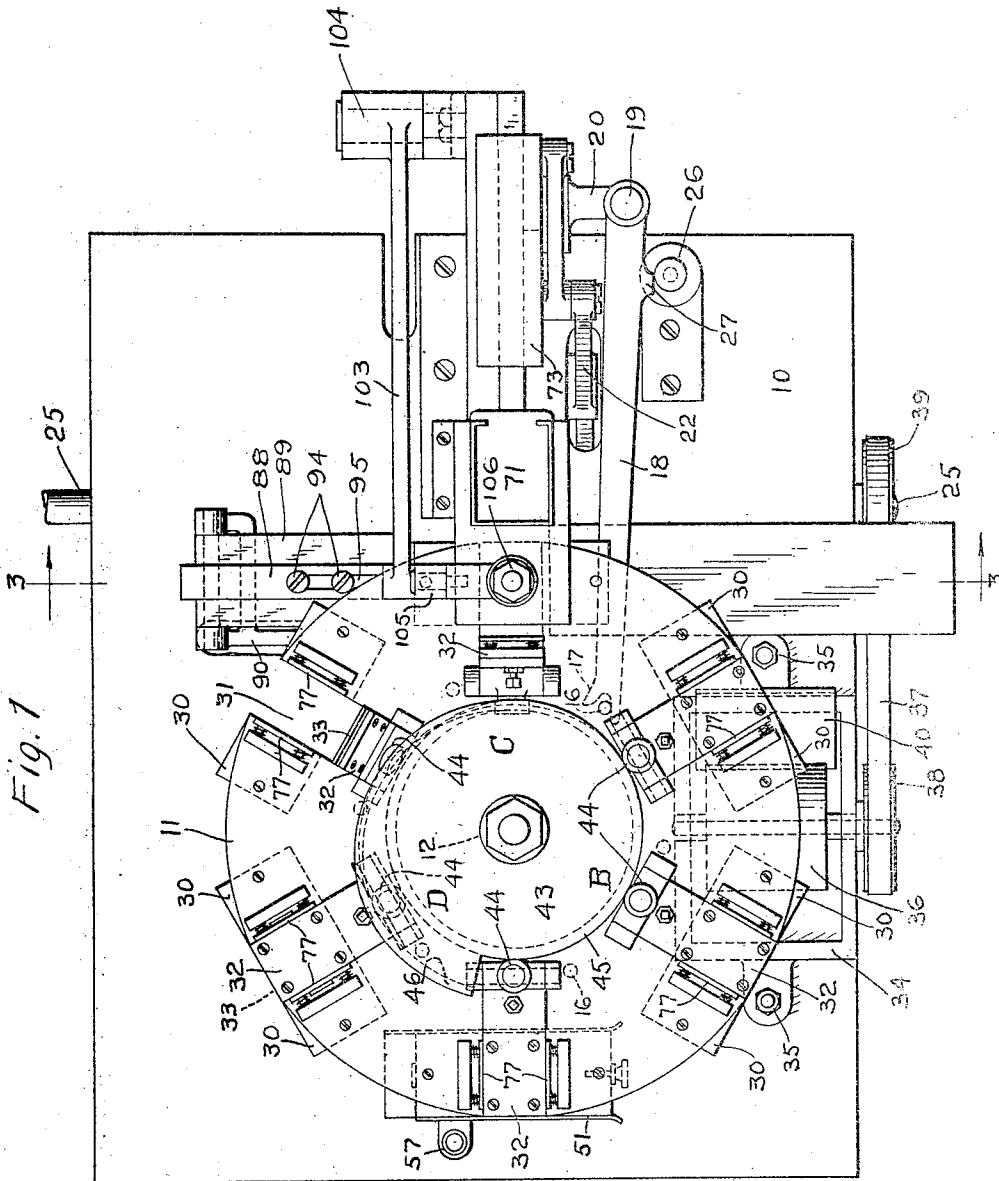
LABELING MACHINE.

APPLICATION FILED JAN. 15, 1912.

1,037,971.

Patented Sept. 10, 1912.

5 SHEETS-SHEET 1.



WITNESSES:

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S. W. Ashton.

INVENTOR.

Charles H. Ohlsson

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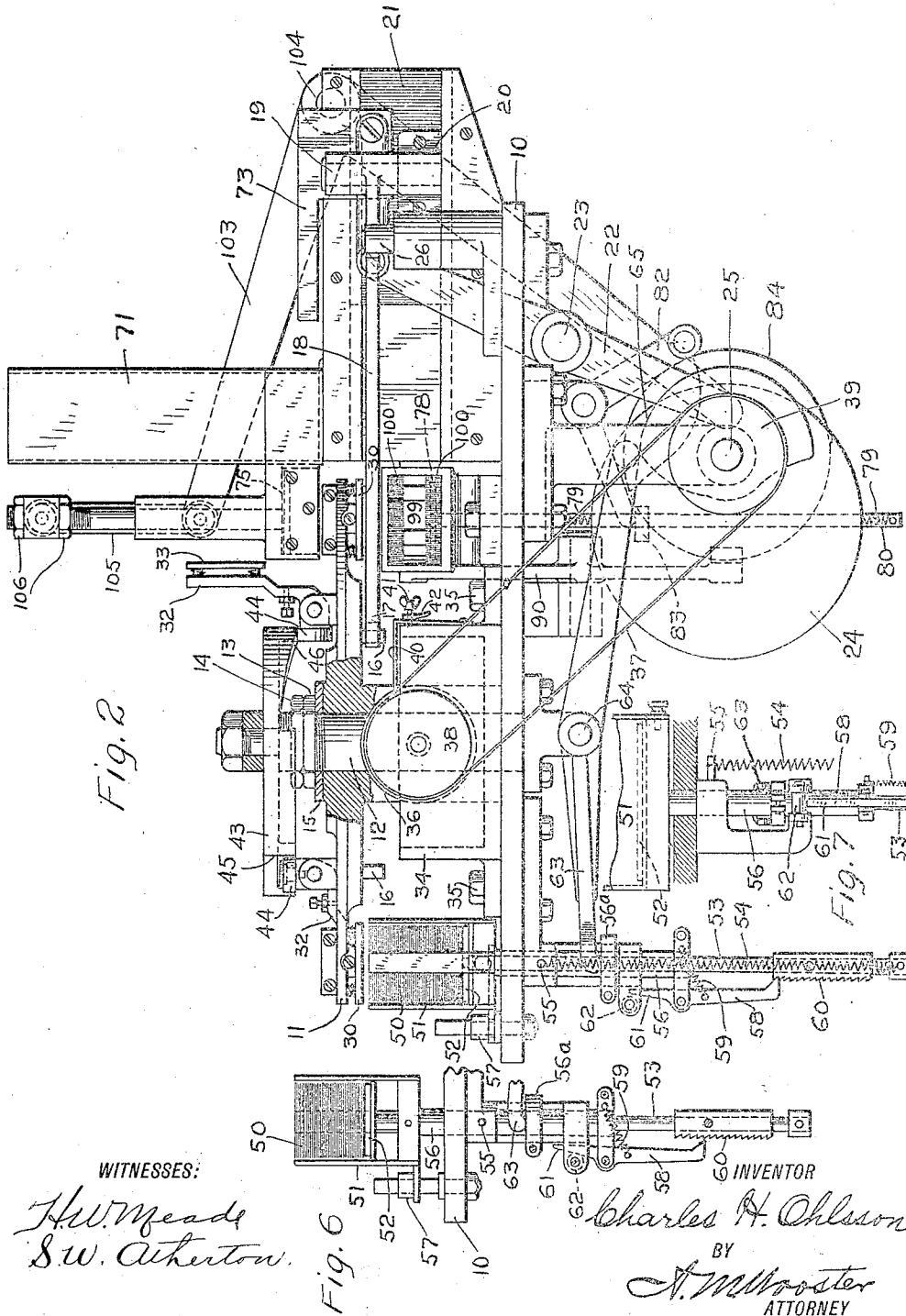
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6 SHEETS—SHEET 3.

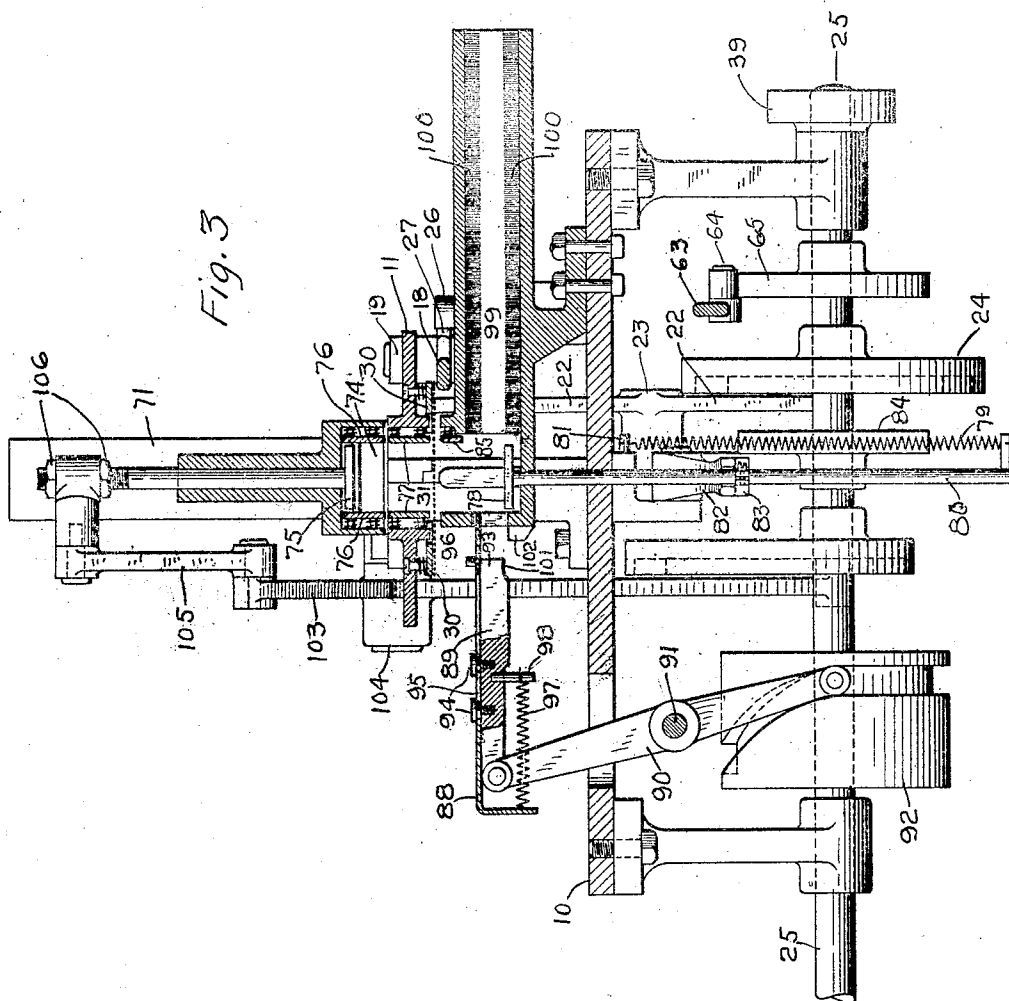


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WITNESSES:

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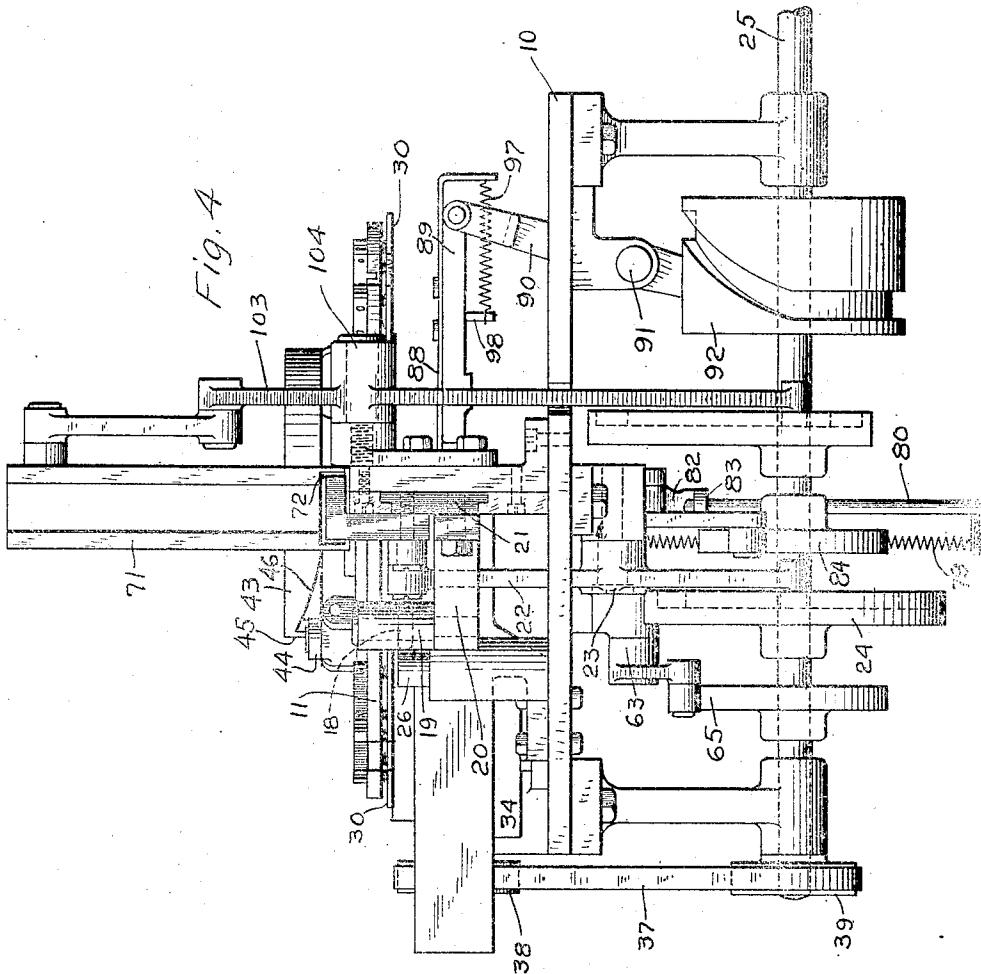
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SHEET 4.



WITNESSES:

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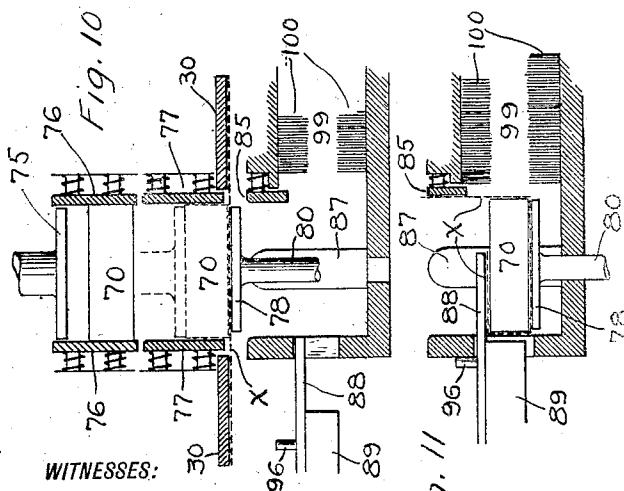
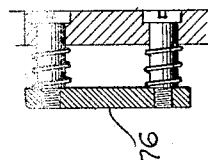
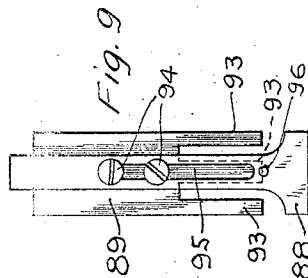
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5 SHEETS—SHEET 5.



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UNITED STATES PATENT OFFICE.

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LABELING-MACHINE.

1,037,971.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Application filed January 15, 1912. Serial No. 671,296.

To all whom it may concern:

Be it known that I, CHARLES H. OHLSSON, a citizen of the United States, residing at New York city, county of New York, State of New York, have invented an Improvement in Labeling-Machines, of which the following is a specification.

This invention relates to certain new and useful improvements in machines for applying labels to boxes and the like.

Among the objects of the invention is the provision of improved means for applying adhesive to the labels.

A further object is to provide means for accurately feeding the labels to the adhesive applying apparatus and for transferring said labels successively to the point of application to the boxes.

A further object is to provide means for automatically and successively feeding the boxes in time with the placing of the label in position to be applied thereto.

A further object is to provide simple mechanism for folding the label around the box and pressing the same against the latter, and finally discharging the box from the machine.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a plan view of a label-applying machine embodying the features of my invention. Fig. 2 is a front elevation thereof, parts being shown in section. Fig. 3 is a sectional view on the line 3—3 Fig. 1. Fig. 4 is an end elevation as seen from the right in Fig. 2. Fig. 5 is a partial elevation of the front of the machine as seen in Fig. 2, with parts in section. Fig. 6 is a detail of the label feed mechanism in which the parts have moved from the position illustrated in Fig. 2. Fig. 7 is a detail view of the label feeding mechanism as seen from the left in Fig. 2, parts being shown in section. Fig. 8 is a detail view of one of the presser plates. Fig. 9 is a top plan view of the label folding and push plates. Fig. 10 is a diagrammatic view illustrating the movement of a box about to have a label applied thereto. Fig. 11 is a diagrammatic view illustrating the completion of the operation shown in Fig. 10.

Referring to the drawings, 10 designates the bed of the machine and 11 a turn table or carrier mounted to rotate about a stud 12

secured to the base in any suitable or preferred manner. The turn table or carrier is secured in position on the stud 12 by means of the nut 13 and lock-nut 14, a fiber washer 15 being interposed between the nut 13 and the hub of said turn table or carrier. Projecting from the under side of the turn table or carrier 11 are pins 16 adapted to be engaged by the forked end 17 of a lever 18 which is pivoted at 19 on a bracket 20, which in turn is carried by a reciprocating slide 21. The slide 21 is operated by a lever 22 pivoted at 23 to a bracket bolted to the under side of the bed 10. Power is applied to said lever 22 through a cam 24 on the cam shaft 25. As the lever 18 is operated the turn table or carrier 11 is swung in an arc about its center by reason of the engagement of the forked end 17 of the lever with the pins 16, but said lever on returning to its normal position is forced by a roll 26 engaging a projection 27 on the lever, to swing back into the position shown in Fig. 1 ready to engage the next succeeding pin 16.

On the under side of the turn table or carrier 11 are mounted six pairs, more or less of adhesive-applying plates 30 which are backed up by suitable springs so as to yieldingly support the plates. Each pair of said adhesive applying plates is located on opposite sides of an opening 31 formed in the turn table or carrier 11, and between said plates and opposite said opening is located a hinged leaf 32 also provided with spring pressed plates 33 similar to the plates 30. A glue box 34 of any suitable or preferred construction is bolted to the bed 10 by nuts 35 and mounted in the glue box is a feed roll 36 which is rotated by means of a belt 37 connecting the pulley 38 on the shaft of said roll with the pulley 39 on the shaft 25. A suitable scraper 40 is provided to remove the excess glue that may be taken up by the roll 36, said scraper being adjusted by means of a thumb screw 41 and a lock nut 42 as shown in Fig. 2.

Rigidly secured to the stud 12 is a cam 43 arranged to engage rollers 44 carried by the pivoted members 32. In the positions indicated by B the rollers 44 are in engagement with the surface 45 of the cam, but as the parts move to the position D, the roll 44 passes under the cam surface 46, whereupon said roll is drawn inward until the leaf is swung into a vertical position as shown in Fig. 2. Upon moving to the position C the

roll follows the incline of the cam portion 46 until it reaches its normal position.

The operation of the above described parts is as follows:—As the turn table or carrier is rotated step by step by the lever 18, the plates 30 and 33 of the adhesive applying plates are caused to successively engage the surface of the adhesive applying roller 36, whereupon the requisite amount of adhesive is applied to said plates. After leaving the glue applying roller 36 said plates come in contact with the labels supplied in a manner to be later described, the topmost label adhering to said plates. When the movement is continued the label is carried around by the plates 30, 33 and the member 32 is raised by the cam 43 leaving the label adhering to the plates 30 and bridging the opening 31. While thus supported the label is moved to the position to be applied to the boxes as hereinafter described.

The labels 50 are stacked in a magazine 51 and are supported by a plunger 52 provided with an operating rod 53 to which is secured one end of a spring 54, the other end of said spring being attached to a stud 55 secured to the bed of the machine, said spring acting normally to raise the plunger 52. The magazine 51 is provided with a sleeve 56 slidably mounted on the rod 53, said magazine being prevented from turning by a suitable guide device 57. Pivotally mounted in the lower end of the sleeve 56 is a pawl 58, a spring 59 acting to hold said pawl normally in engagement with a ratchet 60 secured to the lower end of rod 53. The upper end of said pawl is reduced at 61 to engage a stationary cam roller 62. The sleeve 56 is normally held depressed by a lever 63 engaging a collar 56^a, said lever being pivoted to the bed of the machine at 64 and operated by a cam 65 also secured to the shaft 25. In operation, the sleeve 56 is held depressed by the lever 63, and by reason of the pawl 58 engaging the ratchet 60 the plunger 52 is also held depressed against the tension of spring 54. When the lever 63 is operated to remove the pressure from the sleeve 56 the spring 54 moves the plunger rod 53 upward, and by reason of the engagement of the pawl 58 and ratchet 60 the magazine 51 is also carried upward until the topmost label engages the plates 30, 33. As the labels are exhausted the relative movement of sleeve 56 and rod 53 becomes greater and greater until the reduced end 61 of pawl 58 engages the roller 62, moving said pawl out of engagement with the ratchet 60, whereupon the magazine stops, but the plunger 52 moves forward or upward to elevate the package of labels so that the topmost label will contact with the plates 30, 33. As the lever 63 re-

engages the sleeve 56 to depress the same the pawl 58 is again caused to engage the ratchet 60 to depress the plunger, but by reason of the relative movement of the plunger and sleeve above described, the pawl engages the next lower tooth to the one previously engaged. In this manner the parts are made to compensate for the removal of the labels from the magazine.

The boxes to be covered, indicated at 70 are stacked in a chute 71 provided at its lower end with a transverse opening 72 to receive a plunger 73 which is arranged to force the box through an opening 74 beneath a plunger 75. The box feeding plunger 73 is connected with slide 21 and is carried forward by the same movement which operates lever 18, as heretofore described. The label applying chamber through which the plunger 75 is arranged to move is provided with oppositely disposed vertically arranged spring pressed plates 76, the friction thereof being sufficient to hold the box. After being positioned beneath the plunger 75 the box is pushed down by the latter between the plates 77 supported by carrier 11 on both sides of openings 31, the lower face of the box coming in contact with the adhesive coated label X supported by the plates 30, as indicated in dotted lines in Fig. 10. A second plunger 78 is located opposite plunger 75 to serve as an abutment therefor and is timed to meet the box 70 as it comes in contact with the label X. The plunger 75 continues to force the box downward and against the lower plunger 78, which latter has been carried up by a spring 79, one end of which is secured to a plunger rod 80 the other end being secured to a stud 81 carried by the bed of the machine. The tension of the spring 79 is such as to normally tend to raise the plunger 78. A cam actuated lever 82 controls the movement of the rod 80 and plunger 78 through the medium of a collar 83 engaged by one end of the lever, the cam 84 for operating said lever being secured to the shaft 25. The upper plunger 75 continues to force the box downwardly and against the lower plunger 78 which causes the label to firmly adhere to the lower side of the box, and a continued downward movement forces the box between one wall of the label-applying chamber and an opposite spring pressed plate 85, said wall and plate cooperating to cause the label to be pressed against the narrow edges of the box. Upon reaching its lowermost position the box will be held between spring plate 86 cooperating with an opposite fixed wall 87.

Mounted to reciprocate between the plate 86 and wall 87, is a label folding slide 88 and a discharge plunger 89. The plunger 89 is reciprocated by means of a lever 90 pivoted at 91 and operated by a cam 92

secured to shaft 25, said plunger being provided at its forward end with a plurality of fingers 93, best illustrated in Figs. 5 and 9. The folding slide is held in position on the top of plunger 89 by means of headed screws 94 passed through a slot 95 in said slide 88, the forward end of said slide being provided with a stop-pin 96 adapted to limit the forward movement thereof. A spring 97 connects a downturned portion of the slide 88 with a pin 98 carried by plunger 89, as illustrated in Fig. 3. The forward end of slide 88 overhangs the corresponding end of the plunger 89 and both the slide and plunger are fed forward in unison. As the slide 88 moves forward it engages one projecting portion of the label X (see Fig. 11) forcing it downward against the uncovered upper side of the box, and as this action is completed the stop-pin 96 arrests the movement of the slide. The plunger 89 then engages the box and moves the latter forward out of engagement with the plates 86, 87, and forces the same into the chamber 99 provided with the brushes 100. Said brushes perform the function of turning down the remaining lap of the label. As the boxes are successively covered with labels each box will force the preceding boxes the full length of the chamber 99 until they drop out of the end of the latter with the labels smoothly and firmly adhering thereto. The plunger 89 is provided at its forward end with a cam portion 101 which is adapted to contact with a projection 102 just after the label folding slide has completed its work. The projection 102 by reason of its engagement with the cam-portion 101 lifts the folding slide 88 as the box is being pushed in the chamber 99 so that there will be no opportunity for the end of said slide to catch on the edge of the label and pull the latter off. This upward movement of the plunger 89 and folding slide 88 is permitted by reason of the pivoted connection between said plunger 89 and the lever 90. The forward end of the plunger 89 is supported by means of the forward end of the folding slide 88 resting on the edges of the openings through which said plunger moves. The upper plunger 75 is operated by means of a bell crank lever 103 pivoted at 104, the upper end of said lever being connected with the upper end of the plunger shaft by means of a link 105. The connection with said plunger shaft may be regulated by means of nuts 106.

From the foregoing it will be seen that as the turntable or carrier 11 is rotated the plates 30, 33 are first coated with adhesive and then are moved over the label feeding device 51 where they rest until the label is pushed up thereagainst. The turn table or carrier then continues intermittently on its course until the member 32 has been lifted

out of contact with the label and the latter has been moved to a position between the plungers 75 and 78, as illustrated in Fig. 5. The plunger 75 passes down between the plates 30 through the space previously occupied by the member 32 and also through the space 31, the box blank 70 having been first fed into position beneath said plunger 75. As the plunger 75 moves downwardly the lower plunger 78 causes the label to adhere to the under side of the box and as the box is moved downwardly between the spring plates 76, 77 and 85 the label is pressed against both of the narrow edges of the box, or those edges which are arranged perpendicular to the plungers. The box is then held between the plates 86 and 87 until the slide 88 folds one lap of the label over the top of the box, after which the box is pushed into the chamber 99, whereupon the brushes 100 will fold down the remaining lap over the top face of the box, and smooth out all wrinkles as the box progresses through the chamber 99. It will thus be observed that the boxes are discharged with the labels smoothly and evenly applied thereto.

Having thus explained the nature of my invention, and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what I claim is:

1. A label affixing machine comprising a carrier, adhesive-applying members carried thereby and adapted to support the labels and to apply adhesive thereto, means for applying the coated label to a box while said label is supported by said adhesive applying members, an actuating pawl for moving said carrier to cause said adhesive applying members to place the labels in operative position relative to said applying means, a slide for actuating said pawl, and means connected with said slide for feeding the boxes.

2. A label affixing machine comprising a rotary carrier, adhesive-applying members carried thereby and adapted to contact with the labels to apply adhesive thereto and to support the adhesive coated labels, means for applying the coated labels to boxes while said labels are supported by said adhesive applying members, a lever for rotating the carrier to successively effect the coating of the labels and the placing of the latter in operative relation with said applying means, means for intermittently operating said lever, and means operated by said lever operating means for feeding the boxes.

3. A label affixing machine comprising a carrier, adhesive-applying members carried thereby and adapted to support the labels and to apply adhesive thereto, means for supplying adhesive to said adhesive-applying

- ing members, means for applying the coated labels to boxes, while said labels are supported by said adhesive applying members, a reciprocating member for moving the carrier to cause said adhesive applying members to place the labels in operative position relative to said label applying means, and means actuated by said reciprocating member for feeding the boxes.
- 10 4. A label affixing machine comprising a carrier, spring-pressed adhesive-applying plates carried thereby and adapted to contact with the labels to apply adhesive thereto and to subsequently support the adhesive coated labels, means for applying the coated labels to boxes while supported by said plates, a reciprocating member for moving the carrier to place the labels in operative relation with said applying means, and means actuated by said reciprocating member for feeding the boxes.
- 15 5. A label affixing machine comprising a carrier, a plurality of sets of adhesive-applying members supported by said carrier adapted to contact with the labels to apply adhesive thereto and to subsequently support said labels, means for applying the coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and means for moving one member of each set of adhesive-applying members out of contact with the label previous to presenting the latter to the label applying means.
- 20 6. A label affixing machine comprising a carrier having a series of openings therein, stationary adhesive-applying members located on both sides of each of said openings, a movable adhesive-applying member located opposite each of said openings, said adhesive-applying members being adapted to apply adhesive to the labels and to subsequently support the latter, means for applying the coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and means for successively moving the movable adhesive-applying members out of contact with the labels previous to presenting the latter to the label applying means.
- 25 7. A label affixing machine comprising a carrier, a plurality of sets of adhesive-applying members adapted to contact with the labels to apply adhesive thereto and to subsequently support said labels, means for applying the coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and a stationary cam for moving one member of each set of adhesive-applying members out of contact with the label previous to presenting the latter to the label applying means.
- 30 8. A label affixing machine comprising a carrier, a plurality of sets of spring pressed adhesive-applying plates supported thereby and adapted to apply adhesive to the labels and to subsequently support the latter, one member of each set of plates being provided with a roller, means for applying the coated labels to boxes, and a cam engaging said rollers to move the plate connected thereto out of contact with the label, and means for moving the carrier to place the labels in operative relation with said applying means.
- 35 9. A label affixing machine comprising a carrier, a plurality of sets of adhesive-applying members adapted to apply adhesive to the labels and subsequently support the latter, one member of each set being pivoted, a roller secured to each pivoted member, means for applying coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and a cam for successively moving the pivoted members out of contact with the label previous to presenting the latter to the label applying means.
- 40 10. A label affixing machine comprising a carrier having a series of openings therein, spring pressed plates located on both sides of each of said openings, a pivoted member located opposite each of said openings, a spring pressed plate carried by said pivoted member, said spring pressed plates being adapted to apply adhesive to the labels and to subsequently support the latter, means for applying coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and means for successively moving said pivoted members from a position over their respective openings previous to presenting the labels to the label applying means.
- 45 11. A label affixing machine comprising a fixed stud, a carrier rotatably mounted thereon, a plurality of sets of adhesive-applying members mounted in said carrier, one member in each set being movable, said adhesive applying members being adapted to apply adhesive to the labels and to subsequently support the latter, means for applying the coated labels to boxes, means for moving the carrier to place the labels in operative position relative to the applying means, and a cam carried by said stud for successively moving the movable adhesive applying members out of contact with the labels previous to presenting the latter to the label applying means.
- 50 12. A label affixing machine comprising a carrier, relatively stationary and movable adhesive-applying members supported thereby, means for coating said members with adhesive, means for successively pressing labels against said adhesive-applying members, whereby said labels are coated with adhesive and are subsequently supported by

said members, means for applying the coated labels to boxes while supported by said members, and means for moving said carrier to place the labels in operative position relative to said applying means.

13. A label affixing machine comprising a carrier, relatively stationary and movable adhesive-applying members supported thereby, an adhesive-supplying roller, means for successively pressing labels against said adhesive applying members, whereby said labels are coated with adhesive and are subsequently supported by said members, means for applying the coated labels to boxes while supported by said members, and means for moving said carrier to place the labels in operative position relative to said applying means, said adhesive-applying members being so arranged that the rotation of said carrier successively brings said members into engagement with said supply roller and said label pressing means.

14. A label affixing machine comprising a rotatable carrier, relatively stationary and movable adhesive-applying members supported thereby, means for coating said members with adhesive, means for successively pressing labels against said adhesive-applying members whereby said labels are coated with adhesive and subsequently supported by said members, means for applying the coated labels to boxes while supported by said members, and means for intermittently rotating said carrier to place the labels in operative position relative to said applying means and to place said adhesive-applying members in operative relation with the adhesive supply and with the labels.

15. In a label affixing machine, the combination with a rotatable carrier, adhesive applying members supported thereby, and means for applying labels to boxes, of a label magazine, a plunger within said magazine and constructed to support the labels, a carrier for said magazine, means for permitting relative movement of said magazine and said plunger, and means for periodically locking said plunger and said carrier to move in unison.

16. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying members carried thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, a spring acting normally to raise said plunger, means for depressing said plunger in opposition to the tension of said spring, and means for temporarily locking said magazine and said plunger together.

17. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying members carried thereby, and means for applying labels to boxes, of a label magazine provided with a sleeve, a plunger for supporting the labels having a

rod passed through said sleeve, means for actuating said plunger rod, and means for intermittently locking said rod and sleeve together.

18. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying members supported thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, means for operating said plunger, a ratchet connected with said plunger, a pawl carried by said magazine, and means for intermittently engaging and disengaging said pawl and said ratchet.

19. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying members carried thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, means for operating said plunger, a ratchet connected with the plunger, a spring pressed pawl connected with said magazine and normally engaging said ratchet, and means engaging said pawl for intermittently moving the same out of engagement with said ratchet.

20. In a label affixing machine the combination with a rotatable carrier, adhesive-applying members supported thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, means for operating said plunger, a ratchet connected with said plunger, a spring pressed pawl carried by said magazine and normally engaging said ratchet, said pawl having a cam portion, and a stationary roller arranged to engage said cam portion to disengage said pawl and ratchet.

21. In a label affixing machine the combination with a rotatable carrier, adhesive-applying members carried thereby, and means for applying labels to boxes, of a label magazine provided with a sleeve, a plunger for supporting the labels having a rod passed through said sleeve, means for actuating said plunger rod, a ratchet connected with said plunger rod, a pawl carried by said sleeve, and means for intermittently disengaging said pawl from said ratchet.

22. In a label affixing machine the combination with a rotatable carrier, adhesive-applying members supported thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, a spring acting to normally elevate said plunger, a ratchet connected with said plunger, a pawl carried by said magazine, means for disengaging said pawl and ratchet, and means for moving said magazine downwardly.

23. In a label affixing machine the combination with a carrier, adhesive-applying means supported thereby, and means for applying labels to boxes, of a label maga-

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zine, a plunger for supporting the labels, a spring acting to normally elevate said plunger, a pawl and ratchet connection between said magazine and plunger, means for disengaging said pawl and ratchet connection, a lever for moving said magazine downwardly, and a cam for actuating said lever.

24. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying means supported thereby, and means for applying labels to boxes, of a label magazine provided with a sleeve, a plunger for supporting the labels having a rod passed through said sleeve, a spring acting to normally elevate said plunger, a pawl and ratchet connection between said sleeve and said plunger rod, means for disengaging said pawl and ratchet connection, a collar on said sleeve, and a cam actuated lever engaging said collar to depress said magazine.

25. In a label affixing machine, the combination with a rotatable carrier, adhesive-applying means supported thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, means acting to elevate the plunger, means independent of the plunger acting to depress the magazine, and means for temporarily locking said magazine and plunger together to prevent relative movement thereof.

26. In a label affixing machine the combination with a rotatable carrier, adhesive-applying means supported thereby, and means for applying labels to boxes, of a label magazine, a plunger for supporting the labels, a spring acting to elevate said plunger, a lever acting directly on the magazine to depress the same, and means for periodically locking said plunger and magazine together to prevent relative movement thereof.

27. In a label affixing machine the combination with a carrier, adhesive-applying means supported thereby, and means for applying labels to boxes, of a label magazine provided with a sleeve, a plunger for supporting the labels having a rod passed through said sleeve, a spring acting to elevate said plunger, a cam operated lever engaging said sleeve to depress the magazine, and means for periodically locking said plunger and magazine together to prevent relative movement thereof.

28. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, means for presenting adhesive coated labels below said members, means for successively moving the boxes out of said magazine to a position between said supporting members, a lower plunger beneath said label, means for moving the box

into engagement with said plunger, the latter forming an abutment, and means for moving said boxes out of engagement with said supporting members and past the label presenting means to fold the ends of the label around said box.

29. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, means for presenting adhesive coated labels below said members, means for successively moving the boxes out of said magazine to a position between said supporting members, a plunger beneath the label forming an abutment, a second plunger for moving the box out of engagement with said supporting members and into engagement with said label, and means for moving said boxes out of engagement with said supporting members and past the label presenting means to fold the ends of the label around said box.

30. In a label affixing machine, the combination with a box magazine, of supporting members adjacent thereto, means for presenting adhesive coated labels below the said supporting members, box supporting members carried by said label presenting means, means for successively moving the boxes out of said magazine into engagement with the first mentioned supporting members, means for moving the box out of engagement with the first supporting members and into engagement with the second supporting members, means for causing the label to engage the box while the latter is supported by the second supporting members, and means for subsequently folding the label around the box.

31. In a label affixing machine, the combination with a box magazine, of spring pressed supporting members located to one side thereof, means for presenting adhesive coated labels below said supporting members, means for successively moving the boxes out of said magazine to a position between said supporting members, and relatively stationary spring pressed folding plates in alinement with said supporting members and adapted to fold the labels around the boxes.

32. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, an operating slide for successively moving boxes out of said magazine to a position between said supporting members, a rotatable carrier arranged to present labels below said supporting members, means actuated by said slide for operating said carrier and means for moving said boxes out of engagement with said supporting members and past the label presenting means to fold the labels around the boxes.

33. In a label affixing machine, the com-

5 bination with a box magazine, of relatively stationary supporting members adjacent thereto, an operating slide for successively moving boxes out of said magazine to a position between said supporting members, a rotatable carrier provided with adhesive-applying label-supporting members arranged to position the labels below said supporting members, means actuated by said slide for operating said carrier and means for folding the labels around the boxes.

15 34. In a label affixing machine, the combination with a box magazine, of supporting members adjacent thereto, means for successively moving boxes out of said magazine into engagement with said supporting members, a rotatable carrier arranged to present labels below said supporting members, box supporting means mounted on said carrier, means for moving boxes from said box-supporting members to said box supporting means and into contact with the label, said means also acting to discharge the boxes, and means for folding the label around the box as the latter is discharged from said holding means.

30 35. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, an operating slide for successively moving boxes out of said magazine to a position between said supporting members, a rotatable carrier provided with spaced apart label-supporting members, arranged to position the labels below said supporting members, means actuated by said slide for operating said carrier, means for forcing the boxes successively between said label-supporting members to engage the label, and means for subsequently moving said boxes out of engagement with said supporting members and past the label presenting means to fold the labels around the boxes.

36. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, an operating slide for successively moving boxes out of said magazine to a position between said supporting members, a rotatable carrier arranged to present labels below said supporting members, means actuated by said slide for operating said carrier, a plunger for moving said boxes out of engagement with said supporting members and into engagement with the label, and means cooperating with said plunger for subsequently moving said boxes out of engagement with said supporting members and past the label presenting means to fold the label around said box.

37. In a label affixing machine, the combination with a box magazine, of supporting members adjacent thereto, means for suc-

cessively moving boxes out of said magazine into engagement with said supporting members, a rotatable carrier arranged to present labels below said supporting members, a plunger for moving said boxes out of engagement with said holding means and into engagement with the label, a second plunger serving as an abutment for the first mentioned plunger, and means cooperating with said plungers to subsequently fold the label around the box.

38. In a label affixing machine, the combination with a box magazine, of relatively stationary supporting members adjacent thereto, an operating slide for successively moving boxes out of said magazine to a position between said supporting members, a rotatable carrier provided with spaced apart label supporting members adapted to position the labels below said supporting members, means actuated by said slide for operating said carrier, a plunger arranged to move the boxes successively between said label supporting members to engage the label, and means cooperating with said plunger for subsequently moving said boxes out of engagement with said supporting members and past the label presenting means to fold the label around the box.

39. In a label affixing machine, the combination with a box magazine, of supporting members adjacent thereto, means for successively moving boxes out of said magazine into engagement with said supporting members, a rotatable carrier provided with spaced apart label supporting members adapted to position the labels below said supporting members, a plunger arranged to move the boxes successively between said label supporting members to engage the label, a second plunger forming an abutment for the first plunger, and means cooperating with said plungers for subsequently folding the label around said box.

40. In a label affixing machine, the combination with a box magazine, of box supporting means, a plunger for successively moving boxes out of said magazine into engagement with said supporting means, a rotatable carrier arranged to present labels below said box supporting means, means for folding the labels around the box, and means actuated by said plunger for operating said carrier.

41. In a label affixing machine, the combination with a box magazine, of box supporting means, a plunger for successively moving boxes out of said magazine into engagement with said supporting means, a rotatable carrier arranged to present labels below said box supporting means, means for folding the labels around the box, a pivoted arm for operating said carrier, and connections between said arm and said plunger.

42. In a label affixing machine the combi-

nation with a box magazine, of box supporting means, a plunger for successively moving boxes out of said magazine into engagement with said supporting means, a rotatable carrier arranged to present labels below said box supporting means, means for folding the labels around the box, a cam operated lever for actuating said plunger, a pivoted arm for actuating said carrier, and connections between said arm and said plunger, whereby the former is actuated by the latter.

43. In a label affixing machine, the combination with a box magazine, of box supporting means, a plunger for successively moving boxes out of said magazine into engagement with said supporting means, a rotatable carrier arranged to present labels below said box supporting means, means for folding the labels around the box, a cam operated lever for actuating said plunger, and means actuated by said plunger for rotating said carrier:

44. In a label affixing machine, the combination with a box magazine, of box supporting means, a plunger for successively moving boxes out of said magazine into engagement with said supporting means, a rotatable carrier arranged to present labels below said box supporting means, means for folding the labels around the boxes, a pivoted arm for actuating said carrier, connections between said arm and said plunger whereby the former is actuated by the latter, said arm being provided with a lateral projection, and means adapted to engage said projection to return said arm to operative position.

45. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, and means for reciprocating said plunger and slide.

46. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, and means for arresting the movement of said slide before the completion of the movement of said plunger.

47. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, means for arresting the movement of said slide before the completion of the move-

ment of said plunger, and means for automatically returning said slide to its normal position as said plunger is withdrawn.

48. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, means for arresting the movement of said slide before the completion of the movement of said plunger, and a spring for returning said slide to its normal position when said plunger is withdrawn.

49. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, and means for raising said plunger at the end of its forward movement.

50. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, means for arresting the movement of said slide before the completion of the movement of said plunger, and means for raising said plunger at the end of its forward movement.

51. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, and a stop pin carried by said slide for arresting the movement of the latter before the completion of the forward movement of said plunger.

52. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, and a cam for raising said plunger at the end of its forward movement.

53. In a label affixing machine, the combination with means for supplying adhesive coated labels and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger and slide, and means for arresting the movement of said slide before the completion of

the movement of said plunger, and a cam for raising said plunger at the end of its forward movement.

54. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a slotted label folding slide, screws carried by said plunger and passed through the slot of said slide, and means for reciprocating said plunger and slide.

55. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger provided with a plurality of fingers at its forward end, and means for reciprocating said plunger and slide.

56. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a cam lever for reciprocating the same, and a folding slide carried by said plunger.

57. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a cam lever to which said plunger is pivoted, means for lifting the other end of said plunger at the completion of its forward stroke, and a folding slide carried by said plunger.

58. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, and means for holding the boxes during the operation of said slide.

59. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, and yieldable plates for holding the boxes during the operation of said slide.

60. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the

latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, means for arresting the movement of said slide before the completion of the movement of said plunger, and means for holding the boxes during the operation of said slide.

61. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, means for arresting the movement of said slide before the completion of the movement of said plunger, and yieldable plates for holding the boxes during the operation of said slide.

62. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, means for holding the boxes during the operation of said slide, and a brush chamber into which the boxes are forced by said plunger.

63. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, yieldable plates for holding the boxes during the operation of said slide, and a brush chamber into which the boxes are forced by said plunger.

64. In a label affixing machine, the combination with means for supplying adhesive coated labels, and means for moving boxes into engagement with said labels to fold the latter about the boxes, of a discharge plunger, a label folding slide carried thereby, means for reciprocating said plunger, means for holding the boxes during the operation of said slide, a brush chamber into which the boxes are forced by said plunger, and means for raising said plunger as the box is disengaged from said holding means.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. OHLSSON.

Witnesses:

BERTHA E. MILLER,
FRANKLIN B. COATES.