July 23, 1929. J. A. CEREGHINO 1,722,240

METHOD OF LABELING PACKAGES AND MACHINE THEREFOR

Filed Jan. 3, 1928 5 Sheets-Sheet 1

Fig. 1.

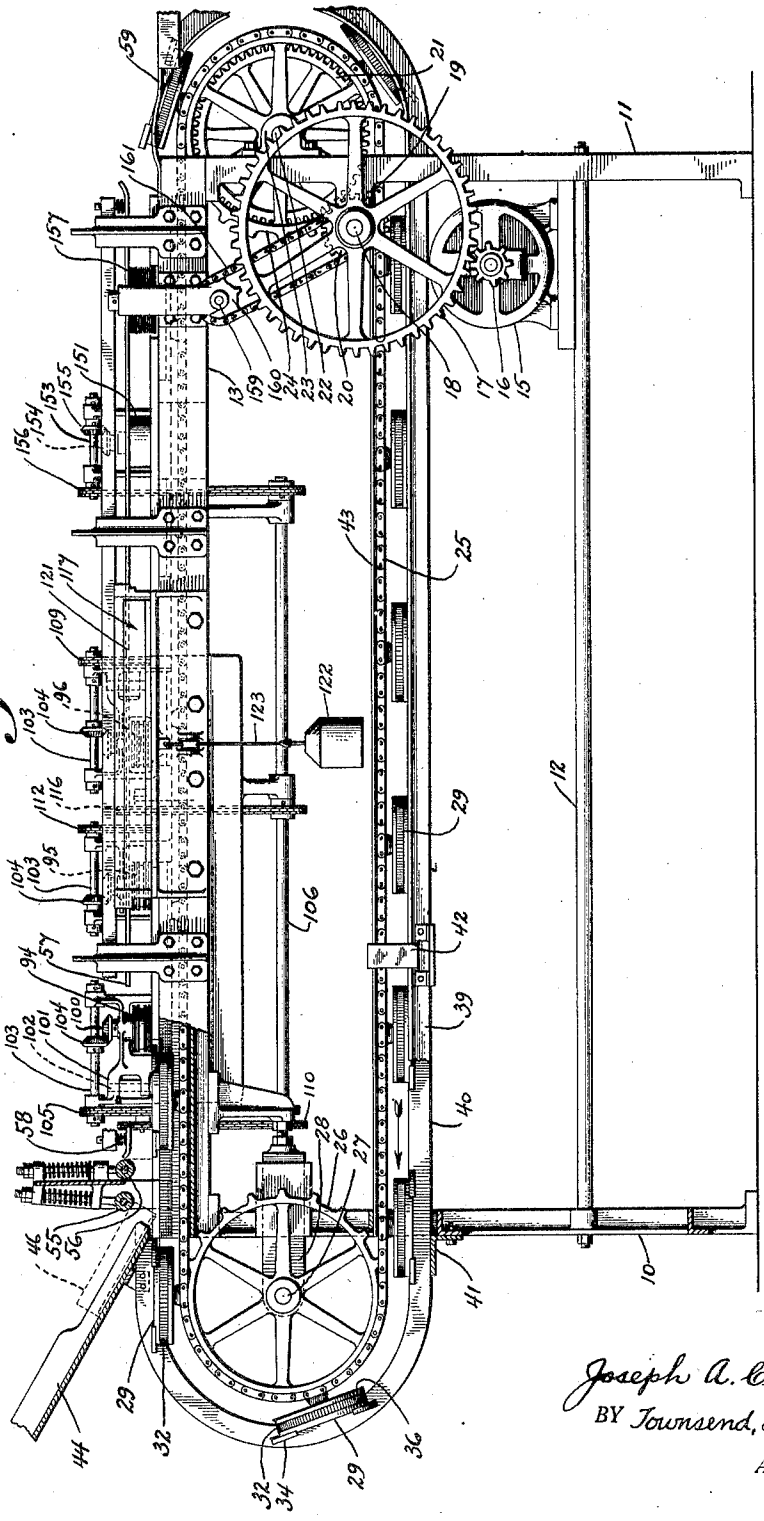


Fig. 16.



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Filed Jan. 3, 1928 5 Sheets-Sheet 2

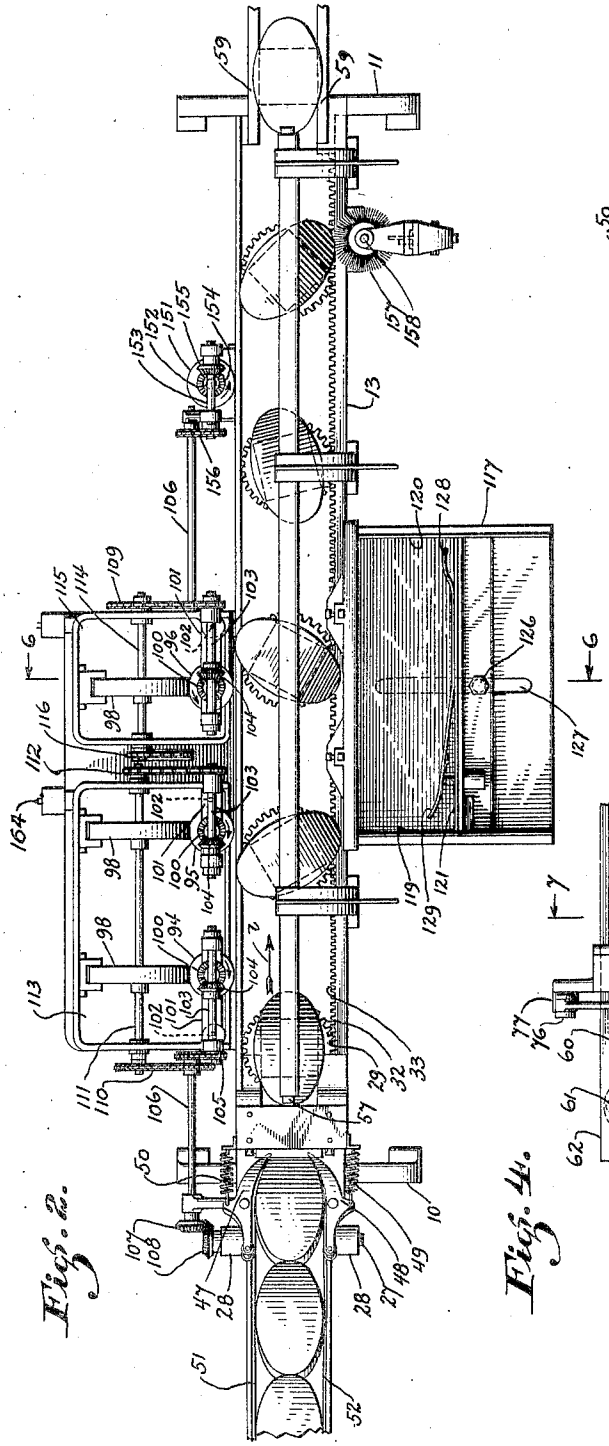


Fig. 2.

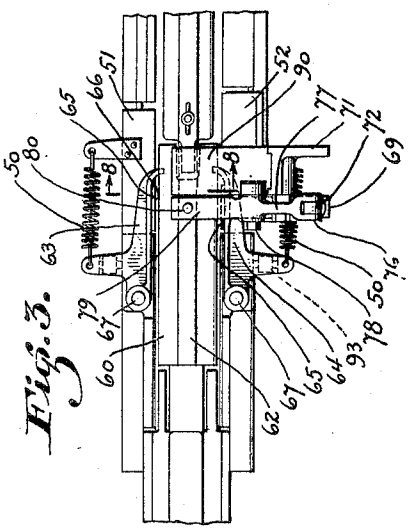


Fig. 3.

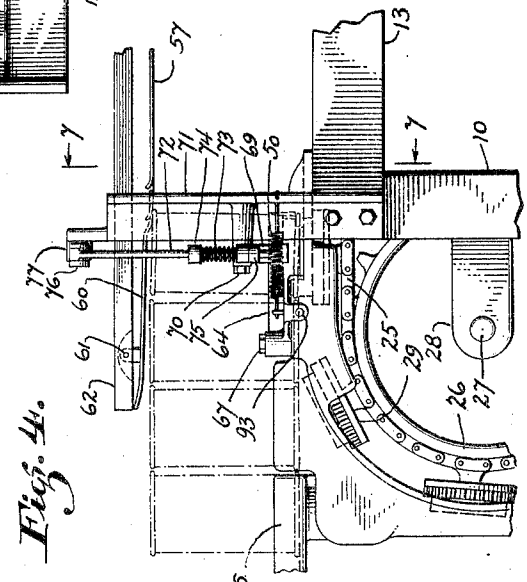


Fig. 4.

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Filed Jan. 3, 1928 5 Sheets-Sheet 3

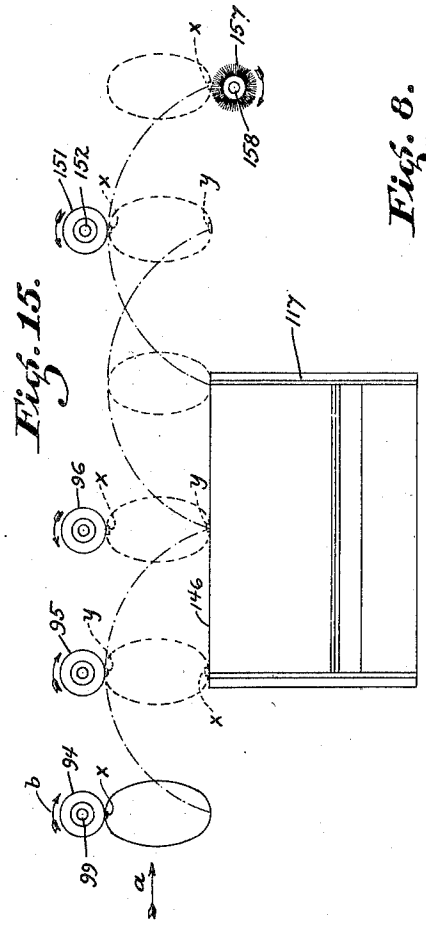


Fig. 15.

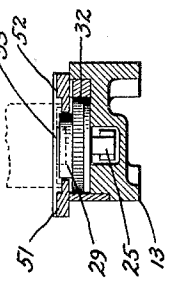


Fig. 8.

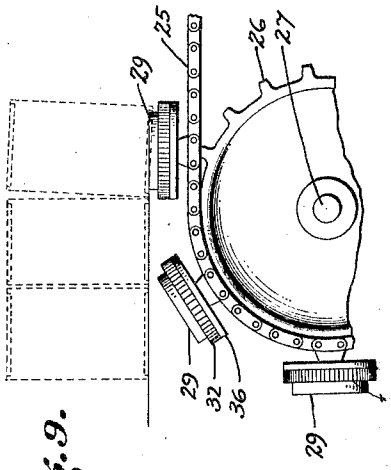


Fig. 9.

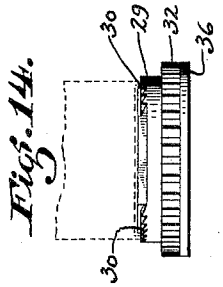


Fig. 14.

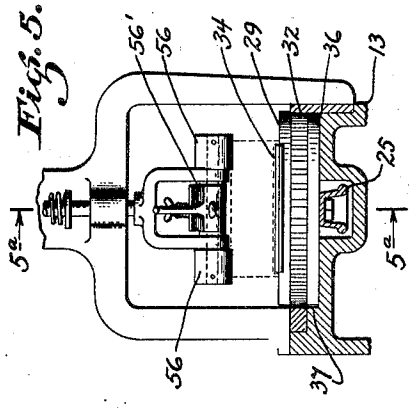


Fig. 5.

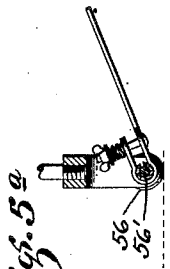


Fig. 5a

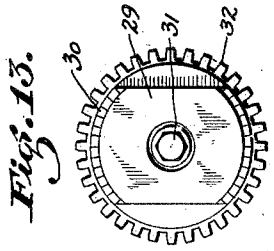


Fig. 13.

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July 23, 1929. J. A. CEREGHINO 1,722,240

METHOD OF LABELING PACKAGES AND MACHINE THEREFOR

Filed Jan. 3, 1928 5 Sheets-Sheet 4

Fig. 7.

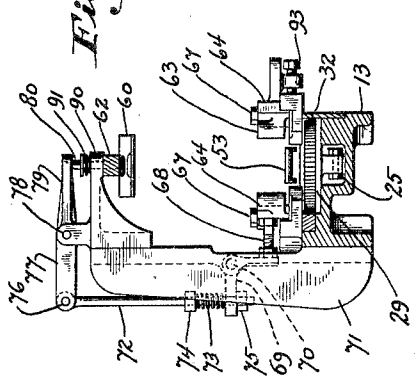


Fig. 6.

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July 23, 1929. J. A. CEREGHINO 1,722,240

METHOD OF LABELING PACKAGES AND MACHINE THEREFOR

Filed Jan. 3, 1928 5 Sheets-Sheet 5

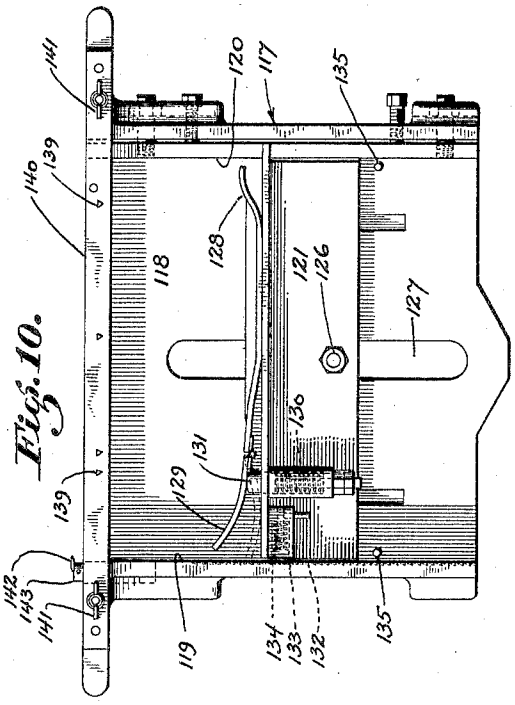


Fig. 10.

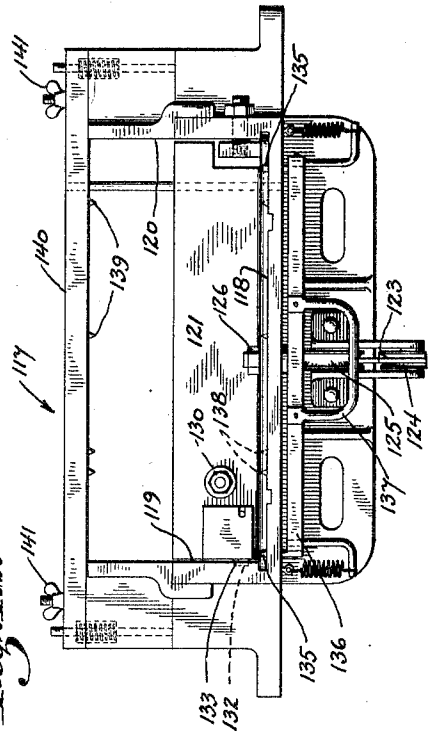


Fig. 12.

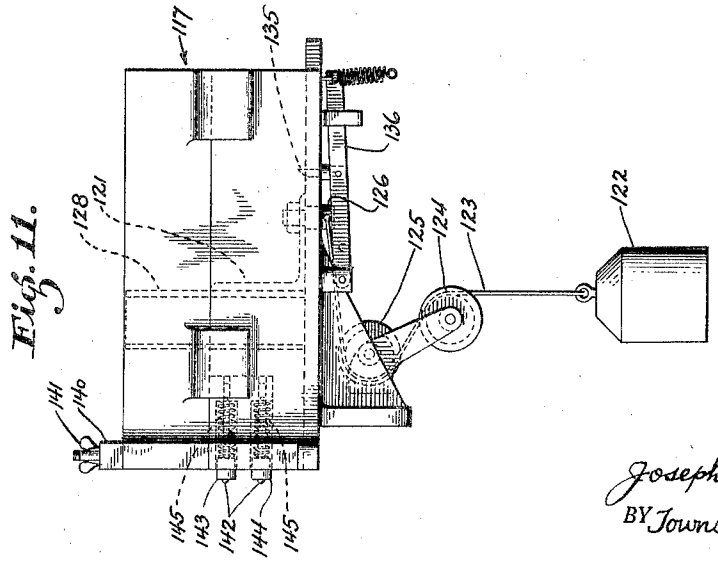


Fig. 11.

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UNITED STATES PATENT OFFICE.

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METHOD OF LABELING PACKAGES AND MACHINE THEREFOR.

Application filed January 3, 1928. Serial No. 244,070.

This invention relates to labeling machines and particularly pertains to means for automatically applying labels to the side walls of cans and like containers. In my co-pending application entitled "Method and apparatus for fastening labels on non-circular cans and containers", filed August 13, 1923, S. N. 657,057 now Patent No. 1,653,495, December 20, 1927, means were shown for attaching labels to the side walls of non-circular cans, particularly cans of elliptical and square shapes. In the present instance it has been the object of the invention to provide means by which labels may be automatically wrapped around cans of any shape and size and fastened thereto.

The present invention contemplates the provision of an endless conveyor upon which cans are ordinarily positioned and by which the cans are advanced through the machine in a vertical position and are manipulated as they advance, said structure also including label holding and releasing means and paste applying means whereby a label will be pasted onto the can and will be neatly wrapped therearound as it advances.

The invention is illustrated by way of example in the accompanying drawings in which—

Figure 1 is a view in side elevation showing the can labeling machine with which the present invention is concerned, adapted for use with flat oval cans.

Fig. 2 is a view in plan showing the machine as disclosed in Fig. 1.

Fig. 3 is a fragmentary view in plan showing the can escapement and positioning means for use with square cans.

Fig. 4 is an enlarged fragmentary view in side elevation showing the escapement and positioning means for use with round cans.

Fig. 5 is a fragmentary view in section and elevation showing a brake mechanism acting to retard the cans in their travel.

Fig. 5[a] is a view through Fig. 5 on the line 5[a]—5[a].

Fig. 6 is a view in transverse section through the labeling machine as seen on the line 6—6 of Fig. 2.

Fig. 7 is a view through the can escapement mechanism as seen on the line 7—7 of Fig. 4.

Fig. 8 is a view in transverse vertical section through the escapement mechanism as seen on the line 8—8 of Fig. 3.

Fig. 9 is a diagrammatical view in side elevation showing the manner in which the chucks come up beneath the cans as they are positioned thereupon.

Fig. 10 is a view in plan showing the label feed mechanism.

Fig. 11 is a view in side elevation showing the label feed mechanism.

Fig. 12 is a view in end elevation showing the label feeding mechanism.

Fig. 13 is a view in plan showing the formation of the chuck for use with circular cans.

Fig. 14 is a view in side elevation showing the chuck disclosed in Fig. 13.

Fig. 15 is a view in diagram illustrating the travel of an oval can through the machine and with relation to the pasting and label stations.

Fig. 16 is a view of one of the labels showing where the holding pins have notched it.

Referring more particularly to the drawings, 10 and 11 indicate the supporting legs of the labeling machine. These legs are connected by horizontal tie rods 12 near their feet and are suitably connected at their upper ends by a bed plate 13 bolted thereupon and supported thereby. As shown in Fig. 6 of the drawings, the legs 10 and 11 are of the "A" frame type, thus providing suitable support for all the mechanism required. Mounted upon one end of the connecting structure 12 is a driving motor 15 carrying a driving pinion 16. This pinion is in mesh with a reducing gear 17 on a jacket shaft 18. The shaft 18 is carried in suitable bearings 19 fixed to the end frame member 11. A pinion 20 is fixed to the jacket shaft 18 and is in mesh with a gear 21. The gear 21 is fixed to and carried by a shaft 22 mounted in bearings 23 and carried on the frame member 11. This sprocket shaft 22 carries a sprocket wheel 24 around which an endless sprocket chain 25 is passed. This chain also passes around a sprocket 26 disposed at the opposite end of the machine and carried upon a shaft 27 mounted in bearings 28. The bearings 28 are fastened to the end frame member 10. The shafts 22 and 27 are therefore supported at parallel relation to each other and in the same horizontal plane, while the sprockets 24 and 26 are carried upon the shafts in the same vertical plane. The sprocket chain 25 carries a plurality of can-supporting chucks 29. These chucks may be of different con-

figuration, for example; in Fig. 2 the chucks are shown as being oval, in Fig. 3 they are shown as being square and in Figs. 13 and 14 they are shown as being circular. The chucks are made of different shape to accommodate cans of different style and to insure that the chuck will fit within the recessed bottom of the particular type of can upon which labels are being applied, and will conform to the contour double seamed periphery so that the cans will be held against movement with relation to the chuck as it advances through the machine, as will be hereinafter described. The chucks rotate as advanced and it will be understood that when the chucks are being used with non-circular cans the cans will positively rotate with chucks. In the event, however, that circular cans are being used it is necessary to provide ratchet teeth 30, as shown in Figs. 13 and 14, by which the bottom of the can may be engaged and positively driven. In any event, the chucks are mounted upon pins 31, carried upon certain links of the endless conveyor chain 25, and at spaced equal intervals throughout the length of the chain. Formed as a part of the chuck mechanism and carried directly therebeneath is a gear 32, which is intended to roll along a gear rack 33, carried upon the bed frame 13, as more clearly shown in Fig. 6 of the drawing. It will be seen that the chucks 29 comprise a top plate 34 adapted to fit within the can and a downwardly extending hub 35 around which the gear 32 is mounted and held by screws 35ª. These screws also secure a circular plate 36 in position beneath the gear. This plate is of a diameter substantially the same as the outside diameter of the gear 32, or slightly larger, and bears against a vertical shoulder 37 of the bed plate to aid in guiding the chucks as they rotate and advance through the machine. The pins 31 extend downwardly through bushings 38. The lower run of sprocket chain as indicated in Figs. 1 and 6 passes horizontally between guide bars 39 and 40. These bars are supported upon the cross frame members 41 of the end frames 10 and 11. In Fig. 6 it will be noted that the chuck is for an oval can and that in the view there shown the uppermost chuck is disposed with its major axis parallel to the plane of the view and with its lowermost chuck with its minor axis parallel to the plane of the view. It will also be noted that the gear 32 of the lower chuck does not engage any gear rack as it passes along the guides 39 and 40 and that in the event of non-circular cans the guides 39 and 40 will hold the chucks against rotation and present them to the can-feeding device in proper position.

Supporting arms 42 are secured at intervals throughout the length of the guide rails 39 and 40. These arms overhang the lower run of sprocket chain 25 and carry spring stabilizing members 43, by which the chain is held from vibration. As shown in Fig. 1 of the drawings, the guide rails 39 and 40 extend around the sprocket wheels 24 and 26 at the outer sides thereof to a point in alignment with the upper horizontal run of sprocket chain so that as the chucks move downwardly to pass around the sprocket wheel 24 after the labeling operation, they will be positioned between the guide rails and so that as they move upwardly around the sprocket wheel 26 to the labeling position, they will be between the guide rails and will be held in position thereby.

It will be understood that cans will be continuously fed into the machine from a run of cans and it has been found in practice that cans of different style must be fed into the machine in a different manner, for example; round and oval cans are fed into the machine on an inclined runway 44 as shown in Fig. 1, while in the case of square cans the runway may be horizontally disposed as shown at 45 in Fig. 4. In the case of oval cans the cans will move down the runway as indicated by dotted lines at 46 in Fig. 1, and will then move into engagement with separable jaws 47 and 48. These jaws at their forward end conform substantially to the contour of the oval cans and are yieldably held in position by springs 49 and 50, so that the jaws will act as an escapement for the cans, while permitting the cans to slide downwardly along rails 51 and 52 as seen in Fig. 8.

A central supporting member 53 is disposed beneath the cans and in their pathway support them and prevent them from being struck along their rear edges by the upwardly swinging chucks, which would result in moving the can into the machine in advance of the chuck and thus jamming the machine, for it will be understood that it is intended that the forward edge of the chuck shall engage the forward edge of the lip of the can bottom. Other yieldable retarding means are also shown for the oval cans in Fig. 1. Here it will be seen that rollers 55 and 56 are disposed in the path at the top of the can and bear downwardly and against it to prevent the can from jumping up when it is engaged by the chuck and thus causing the can and chuck to positively meet and engage and then proceed into the machine in an interlocked relation. Rollers 56 are indicated in Figs. 5 and 5ª, where it will be seen that a spring-pressed brake member 56′ engages the roller shaft to retard the can. As the chuck and can carried thereby move onwardly into the machine the top of the can is borne against by a flexible resilient rail 57 which extends throughout the length of the upper horizontal run of the chain and is yieldably held at intervals by spring 58. In this manner each of the several cans passing through the machine at any one time may be continuously, yieldably and separately held upon

their individual chucks without danger of displacement until the cans engage a pair of carry-off rails 59 at the opposite end of the machine.

In the form of the invention shown in Figs. 3, 4 and 7, automatic escapement means for cans is provided. This consists of a spring blade 60 beneath which the cans must pass and with which they will be engaged. This spring blade is pivotally mounted upon a pin 61 carried by a superstructure 62. The blade is pivoted near the incoming cans and is free to swing upwardly as the cans pass beneath it. This, however, is limited by a positively operating escapement mechanism which comprises a pair of jaws 63 and 64 disposed along opposite sides of the path of travel of the can. The forward ends of these jaws are formed with horizontal ledges 65 onto which the can may pass. The forward ends of these ledges are formed with additional offset ledges which insure that the forward end of the can will be held upwardly and out of premature engagement by the chuck. The ends of the jaws are grooved inwardly and when the can moves down into a condition to be discharged from between the jaws, the jaws 63 and 64 will swing outwardly against the tension of the spring 50. These jaws are pivotally mounted upon vertical shafts 67 disposed upon opposite sides of the path of travel of can.

One of the jaws carries an adjusting screw 68 which bears against bell crank 69 upon a horizontal pivot pin 70, suitably supported by an upright 71. The head of the adjusting screw 68 bears against the free end of the vertical arm of the bell crank. The horizontal arm of the bell crank is formed with an opening through which a rod 72 passes. A helical spring 73 circumscribes the lower end of the rod and rests against the upper horizontal face of the bell crank arm. An adjusting nut 74 on the rod rests against the upper end of the spring, while a locknut 75 is mounted upon the lower end of the rod 72 and beneath the horizontal arm of the bell crank 69. The rod 72 is pivotally connected by a pin 76 to a horizontal lever 77 carried on a pin 78. This lever swings vertically and its outer free end 79 bears against a vertical sliding pin 80, carried in an arm 90 mounted upon the upright 71. This pin is provided at its upper end with a spring 91 beneath which the horizontal spring blade 60 is positioned. The spring 91 rests upon the arm 90. The lower end of the operating pin 80 is adapted to not only rest against the free end of the vertical swinging escapement blade 60, thus when the two jaws 63 and 64 or 47 and 48 are swung about one of the jaws will act to relieve the escapement mechanism, and will thereby insure that a can will only be released in proper timed relation to a chuck which has engaged that particular can. By reference to Fig. 7 it will be seen that arm 64 is provided with an adjusting screw 93 by which the inward movement of the arm will be limited as determined by the particular can with which the machine is used.

It is the theory of the present invention that a can upon which a label is to be applied will be continuously advanced while vertically aligned and horizontally moving, and will rotate through the machine, and during the advance and rotation of the can through the machine it will at successive points in its rotation receive an application of paste to its side wall and that thereafter this paste, carried by the side wall will act to automatically pick label from a label stack as the can continuously moves and will thereafter cause the label to be wrapped around the can and pasted thereto during the progressive operation of the can through the machine. In order to bring about these results, paste applying stations are provided along one side of the path of travel of the cans and a label supplying station is provided along the opposite side of the path of travel of the cans, the cans so moving as to consecutively and alternately come into contact with the paste applying stations and the label stack, whereby the label will be wrapped around the can and pasted thereto.

The paste applying mechanism includes three stations represented by rollers 94, 95 and 96. These rollers as shown in Fig. 6 of the drawings are formed with a plurality of spaced circumferentially extending grooves 97, which makes it possible for the paste to be satisfactorily carried by the rollers from distributing rollers 98. The paste applying rollers 94 to 96, inclusive are mounted upon vertically disposed shafts 99, each carrying a beveled gear pinion 100 upon its upper end. The shafts 99 are carried on horizontal swinging radius arms 101 which are mounted upon vertical pivots 102 which permit the paste applying rollers to have a yieldable movement with relation to the surface of the can wall upon which they are designed to apply paste. A feature of the paste applying device consists in connecting each of the paste reservoirs on a vertical pivot 163 on the side opposite the vertical shaft 99 and arranging a spring pressed plunger 164 at one corner of the reservoir to force the reservoir inwardly towards the conveyor, whereby the paste applying shaft will press yieldably against the can. Carried by the arms 100 above the vertical shaft 102 is a horizontal shaft 103 upon which a pinion 104 is mounted. The shaft 103 for the paste applying roller 94 is driven through a suitable sprocket train drive 105 from a jacket shaft 106. This shaft is fitted with a bevel pinion 107 in mesh with a similar pinion 108 carried by a shaft 27. Another sprocket train 110 is driven from the shaft 106 and drives a shaft 111 upon which the distribut-

ing rollers 98 for paste applying rollers 94 and 95 are mounted. The shaft 103 for the paste applying roller 95 is driven from the shaft 111 through a sprocket chain 112. It will be noted that the paste applying rollers 94 and 95 are rotating in the same direction with each other and that this direction is against the can. The distributing rollers 98 for the applying rollers 94 and 95 are so mounted with relation to a paste or glue reservoir 113 as to insure that as the rollers rotate they will travel through the paste and up past the paste applying rollers 94 and 95 so that the paste will be delivered to the grooves of the rollers and spread onto the surface of the cans. The paste applying roller 96 is mounted in a manner similar to that previously described with rollers 94 and 95 and is carried on an arm 101. The shaft 103 of this unit, however, is driven through a sprocket chain 109 in a direction opposite to the rollers 94 and 95 and with the movement of the can so that when it applies adhesive material to the surface of the end of the label first fastened onto the can, it will not loosen the label.

The sprocket chain 109 through suitable sprockets from shaft 114 carries the distributor applying roller for the paste applying roller 96. This distributor roller is mounted above a reservoir 115, separate from the reservoir 113, due to the fact that it is desirable to apply a different type of adhesive to the label of the can at the last station. The shaft 114 is driven through a sprocket 116 from the shaft 106.

The labels which are to be applied to the cans are carried in a magazine 117 mounted on the side of the machine opposite from that upon which the paste applying stations are disposed. This magazine has a horizontal floor 118 upon which a stack of labels are placed vertically edgewise, so that the outermost label may be held in a manner to permit it to have free contact with the vertical side wall of a can and to be readily withdrawn from the stack. At opposite sides of the horizontal floor are parallel vertical side walls 119 and 120 between which the labels may advance toward the path of travel of the cans as crowded forwardly by a pusher 121, which slides between side members under the constant pull of a weight 122, which is secured to a cable 123 rove over pulleys 124 and 125, and secured to a pin 126 carried by the pusher and extending through a slot 127 in the floor 118. Mounted upon the front face of the pusher is a resilient feed plate 128. This plate as a separate forwardly curved end 129 to tend to force the ends of the labels outwardly into their initial engagement with the can. This member is under a tension due to the action of an expansion spring 130 acting upon a pin 131 which is yieldably held against the back of the member 129. Ratchet teeth 132 are formed along the feed place of the guide member 119 and are engaged by ratchet pawl 133 which is yieldably held in engagement with the teeth by a spring 134. In this manner the pusher will be held against any retracting movement and will be continuously fed forwardly by the pull of the weight 122. A catch 135 is mounted upon a swinging arm 136 and may be brought into a position to obstruct the feeding movement of the pusher 121 while the magazine is being filled. This catch may be released by grasping the handle 137 and drawing downwardly on the swinging arm 136.

The stack of labels is normally retained within the magazine by a plurality of holding prongs engaging the top and bottom edges of foremost labels in the stack. As shown in Fig. 12 of the drawings there are a plurality of prongs 138 extending upwardly from the floor 118 and a complementary set of downwardly projecting prongs 139 extending downwardly from a crossbar 140, detachably secured wing nuts 141 at to top of the magazine. These prongs are of very short length but offer sufficient resistance to prevent the stack of labels from being forced outwardly from the magazine while holding the foremost label in such a delicate manner as to permit it to be stripped from the face of the stack when the label is being rolled onto the can by the adhesion of the paste carried by the can. In order to begin the operation to strip the foremost label from the stack of labels in the magazine, a set of operable retaining prongs 142 are provided. These prongs engage the vertical edge of the label which first comes into contact with the can. The prongs 142 are more clearly shown in Figs. 10 and 11, are mounted upon yieldable plungers 143 and 144, held against inward movement springs 145. These plungers extend into the path of travel of the rotating can a sufficient distance to insure that the can will force the retaining prongs 142 through the paper of the first label as indicated by the view of the label shown in Fig. 16 of the drawings. The cut portions at the vertical edge being of a label 146, being indicated at 147 and 148. After the label has come into contact with the line of paste which has been spread along a vertical surface of the can the label will adhere thereto so that as the can rotates it will go with the can and the notches 147 and 148 will permit the retaining prongs 142 to pass there through without obstructing the label in any way. As the can progressively rotates through the machine it will then cause the prongs 138 and 139 to be pulled through the edges of the label to make the small notches 149 and 150, indicated in Fig. 16.

Disposed in the path of travel of the advancing can and at the point where the label has completely wrapped around the can and overlapped, the overlapping portion contacts

with a rubber roller 151. This roller is especially made of sponge rubber so that it will yieldingly wipe and smooth the overlapping ends of the label and thus finish the labeling operation. The roller is mounted upon a vertical shaft 152, driven from a horizontal shaft 153 through gears 154 and 155. The gears are in turn driven by a sprocket chain 156 which is led around a sprocket on the shaft 106. The rubber roller rotates in the same direction as the direction of movement of the surface of the can disposed on the opposite side of the path of travel of the can, and a one half turn in advance in the rotation of the can is a vertically disposed brush 157 which is mounted upon a shaft 158. This finally brushes and wipes the overlapping joint at the end of the label. The shaft 158 is driven through suitable gearing connecting it with shaft 159 which carries a sprocket 160 driven by sprocket chain 161 receiving its power from sprocket wheel 162 on shaft 18.

In operation of the labeling machine cans are fed in on a runway 44, to the machine. When square cans are being labeled this runway is disposed horizontally and the cans move in a direct line horizontally, but when round or oval cans are delivered to the machine it is desirable to dispose the can chute 44 at an incline to the horizontal, so that the forward edge of each of the cans will project downwardly into the path of travel of the chuck which will tend to pull the can with the chuck, so that the can will fit snugly over the chuck as it reaches a horizontal direction of travel.

As indicated in Fig. 1 of the drawings, oval cans are being fed into the machine. In this case these cans move beneath rollers 55 and 56. As they enter the machine, the rollers are yieldably held by spring members shown above them in Fig. 1. Roller 56 is more clearly shown in Figs. 5 and 5a, where it will be seen that there are two separate roller elements mounted upon a shaft with a friction brake member 56′ disposed between them. This brake member retards rotation of the rollers and their shaft, and engages the can to slightly retard its advance and to insure that the can will snugly fit upon the advancing chuck.

The rollers 55 and 56 are preferably formed of rubber, so that they will yieldably engage the upper edge of the can and firmly hold it during the positioning operation upon the chucks. After the can has become seated on a chuck which is to carry it through the machine, it is advanced in the direction of the arrow "a", as indicated in Figs. 2 and 15. During this advance the gear 32, which is moving with the chuck and is in engagement with the rack 33, will advance and cause the chuck to rotate.

In the installation shown in Fig. 2, the oval can will rotate until its major axis will be disposed transversely of the longitudinal path of travel of the can through the machine. At this time a limited vertical area on the end of the can will be in contact with the paste applying roller 94. This roller is rotated in the direction of the arrow "b", as indicated in Fig. 15 and will apply a sufficient amount of paste upon the end of the can to thereafter engage and hold a label. As the can continues to advance through the machine in the direction of the arrow "a" the can will rotate until the end of the can upon which paste has been previously applied,—the chuck holding the can—will rotate a half revolution and then come in contact with the foremost label 146 in the label magazine. At the same time the can will engage members 143 and 144, and press these members inwardly against the tension of spring 145. This will cause the knives 142, carried by the members 143 and 144, to cut through the end edge of the label as indicated at 147 and 148 in Fig. 15. As the can continues to rotate the label will be pulled over these knives as it adheres to the can and will move therewith.

At the time the label is being affixed to the can, the opposite end of the can is in contact with a paste applying roller 95, whereby another patch of paste is applied to the diametrically opposite end of the can. As the can continues to rotate the first patch of paste marked "x" will move to a position in contact with a paste applying roller 96, and the second patch of paste marked "y" will move into contact with the label at a point intermediate its ends. During this rotation the label will be gradually stripped from the stack of labels in the magazine, and will be pulled over the pins 138 and 139 and will be drawn taut around the can.

Then the paste spot "x" and the label adhering thereto reaches the paste applying roller 96, paste will be applied to the adhering end of the label so that as the spot "x" pursues another half revolution to the end of the label magazine, the free end of the label will be wrapped around and over the paste carrying end of the label, and the labeling operation will thus be completed.

At this same time, when the overlapping ends of the labels are pasted together, the spot "x" will come into engagement with a rubber roller 151, by which the label will be smoothed down onto the paste and as the can continues to rotate it will pass a brush 157, which will brush off any particles of paste that show on the label and smooth the label down onto the can.

It will be understood that in the case of square cans, a labeling operation will be substantially the same, with the exception that the corners of the cans will strike the rollers, and in that event it is necessary to adjust the lane between the rollers and the magazine to accommodate the dimensions of the can, and

to also adjust the position of the paste applying rollers with relation to each other, to insure that the corners of the can strike the rollers.

In feeding the oval cans from the can chute 44, it is only necessary to rotate the feeding movement by spring arms 47 and 48 until the forward edge of the can is engaged by the chuck.

In connection with square cans it has been deemed advisable to move the cans vertically and to provide an automatic escapement mechanism as particularly shown in Figs. 3 and 4. Here it will be seen that as the cans pass into a machine they encounter yieldable arms 63 and 64. These arms will remain in position until the chuck strikes the lugs 66 on the arms, at which time they will spread and release the can as the arms swing outwardly to spread the escapement mechanisms of Figs. 3, 4 and 7 for spreading to relieve pressure upon the overhead spring member 60, and to permit the can to advance while being positioned upon the chuck.

It will be seen from an examination of Figs. 1 and 6 that the cans are held to travel beneath a yieldable spring member 57 so that they will not be displaced while in the machine and cause it to jam.

It will thus be seen that the device here disclosed will act rapidly and with certainty to automatically apply labels to cans of any configuration.

While I have shown the preferred form of my invention as now known to me, it is to be understood that various changes may be made in its construction without departing from the spirit of the invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A machine for applying labels to packages which comprises an endless conveyor moving in a vertical plane and carrying a plurality of chucks onto which packages may be positioned and by which they may be carried in a horizontal plane through the machine while simultaneously rotating around their vertical axes, a package chute at one end of said upper run of endless conveyor and along which packages in a continuous flow are delivered to the machine, package timing means associated therewith and by which packages may be properly and consecutively positioned upon the chucks of the endless conveyor, yieldable means disposed over the path of travel of the packages and adapted to hold the packages on the chucks as they advance, a series of paste applying members disposed along one side of the path of travel of the package and with which points on the periphery of the package contact as the package rotates and advances, a label magazine disposed along the opposite side of the path of travel of the package and supporting labels in a longitudinal position parallel to the path of travel of the packages and along which magazine the packages advance and rotate, and final means for pressing the label onto the package and brushing it down as the package continues to advance.

2. A labeling machine comprising a label magazine by which a stack of labels is supported in an edgewise vertical position while extending horizontally, means for carrying packages in a path of travel parallel to the length of the labels and with the outermost of which labels the package contacts, means for automatically applying an adhesive to a point on said package prior to its contact with the label whereby the adhesive will act to draw the outermost label from the stack in the magazine while wrapping the label around the package as the package rotates and advances, means for wiping and yieldably applying adhesive to the outer surface of the initially applied end of the label and means for applying pressure to smooth the overlapping end of the label down upon the last named adhesive carrying surface.

3. A labeling machine comprising a label magazine by which a stack of labels is supported in and edgewise vertical position while extending horizontally, means for carrying packages in a path of travel parallel to the length of the labels and with the outermost of which labels the package contacts, means for automatically applying an adhesive to a point on said package prior to its contact with the label whereby the adhesive will act to draw the outermost label from the stack in the magazine while wrapping the label around the package as the package rotates and advances, means for applying adhesive to the outer surface of the initially applied end of the label, means for wiping and yieldably applying pressure to smooth the overlapping end of the label down upon the last named adhesive carrying surface, and means applying adhesive material to the package at intermediate points between the ends of the label.

4. In a device of the character described, an endless conveyor having package receiving members thereon provided with chucks, a package chute adapted to deliver packages in succession to the upper run of said endless conveyor, means for restricting the discharged end of the chute to prevent the flow of packages therefrom and means actuated by the successive chucks carried by the endless conveyor to automatically relieve said restriction and withdraw one package from the chute while positioning it upon said chuck.

5. In a device of the character described, an endless conveyor having package receiving members thereon provided with chucks, a package chute adapted to deliver packages in succession to the upper run of said endless conveyor, means for restricting the dis-

charged end of the chute to prevent the flow of packages therefrom and means actuated by the successive chucks carried by the endless conveyor to automatically relieve said restriction and withdraw one package from the chute while positioning it upon said chuck, and means extending along the path of travel of the package to hold the package onto the advancing chuck and in engagement therewith.

6. In a device of the character described, an endless conveyor having package receiving members thereon provided with chucks, a package chute adapted to deliver packages in succession to the upper run of said endless conveyor, means for restricting the discharged end of the chute to prevent the flow of packages therefrom, means actuated by the successive chucks carried by the endless conveyor to automatically relieve said restriction and withdraw one package from the chute while positioning it upon said chuck, means extending along the path of travel of the package to hold the package onto the advancing chuck and in engagement therewith, and means for causing said chuck with the package carried thereby to rotate around the vertical axis of the package as the package is advanced.

7. In a label applying machine a label magazine within which a stack of labels is disposed at a vertically edgewise position, and with their length extending horizontally along and parallel to the path of travel of a package, means for advancing and simultaneously rotating a package lengthwise of the labels, means temporarily holding the outermost label from removal, means for applying an adhesive to a point on said package whereby said point will contact with the foremost end of the label, and means acted against by the package simultaneous with the contact of the adhesive points with the end of the label to cause said end of the label to be released from the magazine and to adhere to the adhesive point as the package advances and the label is wrapped therearound.

8. In a label applying machine a label magazine within which a stack of labels is disposed at a vertically edgewise position, and with their length extending horizontally along and parallel to the path of travel of a package, means for advancing and simultaneously rotating a package lengthwise of the labels, means temporarily holding the outermost label from removal, means for applying an adhesive to a point on said package whereby said point will contact with the foremost end of the label, means acted against by the package simultaneous with the contact of the adhesive points with the end of the label to cause said end of the label to be released from the magazine and to adhere to the adhesive point as the package advances and the label is wrapped therearound, and means for producing constant pressure against the back of the stack of labels tending to constantly force the outermost label into a position along the path of travel of the periphery of the package.

9. In a label applying machine a label magazine within which a stack of labels is disposed at a vertically edgewise position, and with their length extending horizontally along and parallel to the path of travel of a package, means for advancing and simultaneously rotating a package lengthwise of the labels, means temporarily holding the outermost label from removal, means for applying an adhesive to a point on said package whereby said point will contact with the foremost end of the label, means acted against by the package simultaneous with the contact of the adhesive points with the end of the label to cause said end of the label to be released from the magazine and to adhere to the adhesive point as the package advances and the label is wrapped therearound, means for producing constant pressure against the back of the stack of labels tending to constantly force the outermost label into a position along the path of travel of the periphery of the package, and means for creating additional pressure against the foremost end of the labels in the magazine whereby said end of the label first engaging the adhesive spot on the package will be forced to adhere thereto.

10. In a labeling machine paste applying means comprising a reservoir, a distributing roller rotating in a vertical plane and dipping into the paste of the reservoir as it rotates, an applying roller formed with circumferentially extending corrugations on its outer face, the periphery of said distributing roller being in contact with the paste applying roller, means for positively driving both of said rollers, and means for yieldably supporting said paste applying roller with relation to the distributing roller and a package against which it is in contact as the package moves past the roller.

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