Feb. 22, 1944. W. D. KIMBALL ET AL 2,342,284

LABELING MACHINE

Filed Oct. 24, 1940 4 Sheets-Sheet 1

Fig. 1

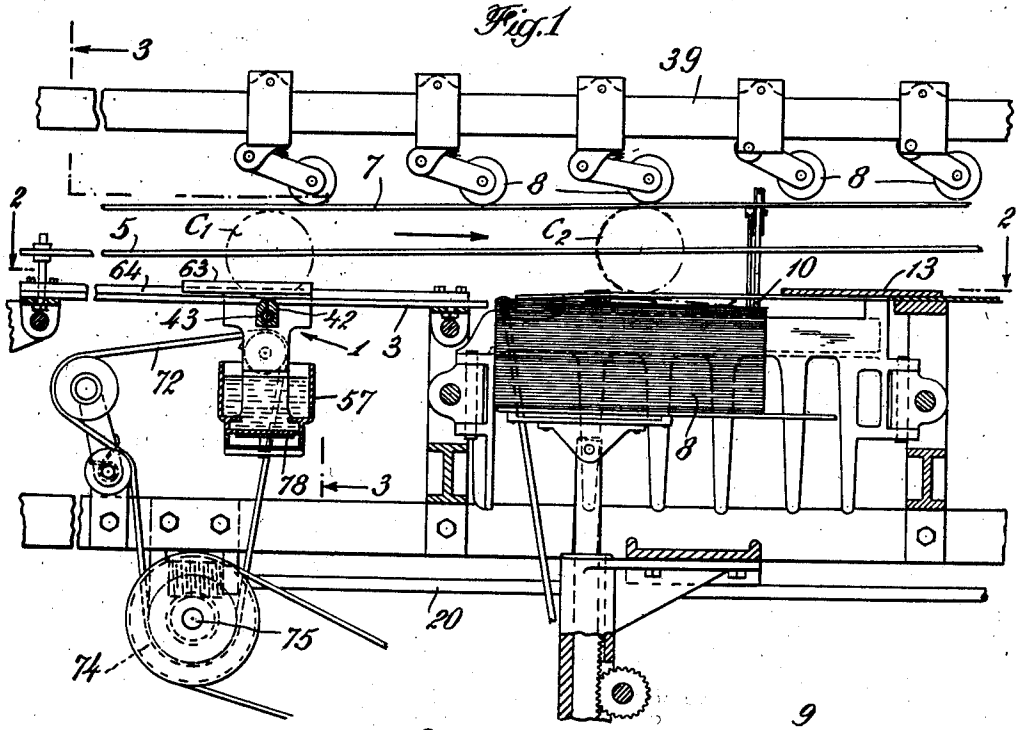
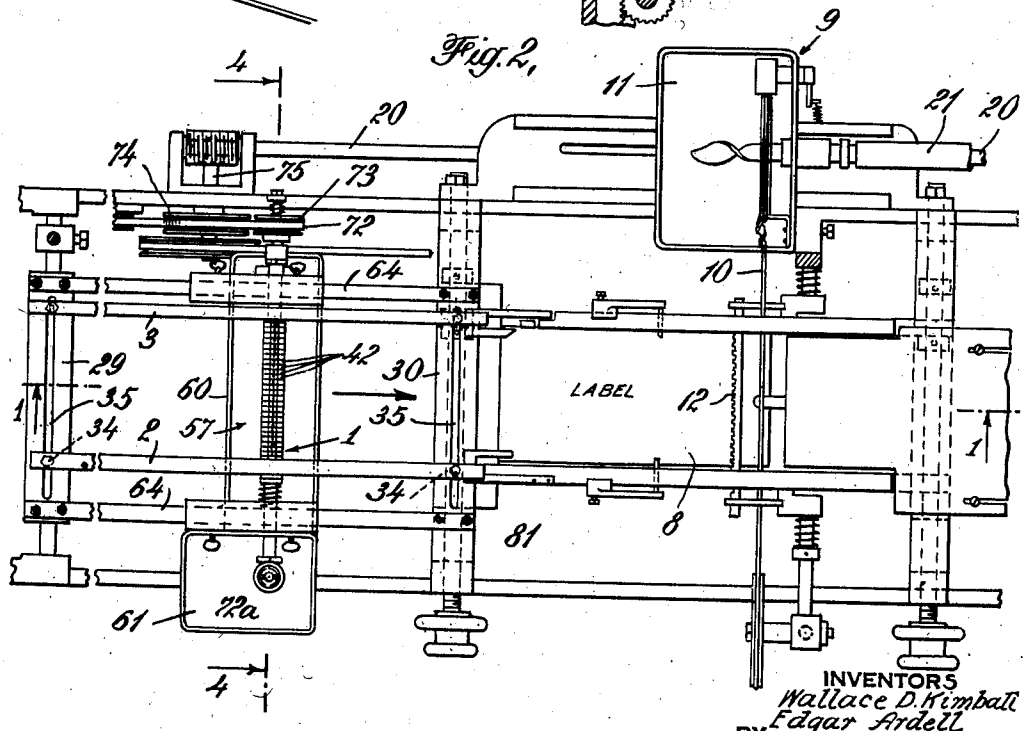



Fig. 2.

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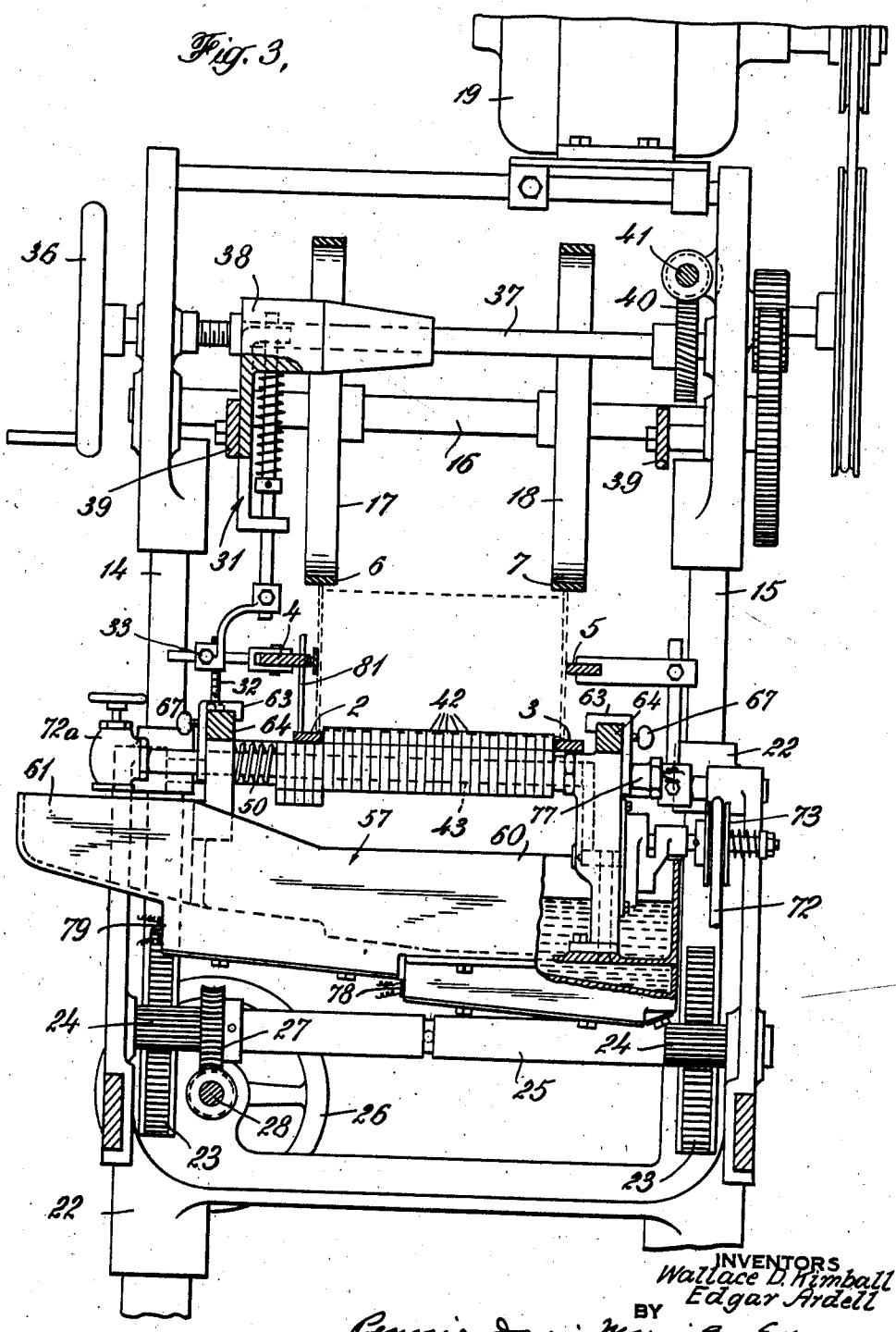
Filed Oct. 24, 1940 4 Sheets-Sheet 2

Fig. 3,

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LABELING MACHINE

Filed Oct. 24, 1940 4 Sheets-Sheet 3

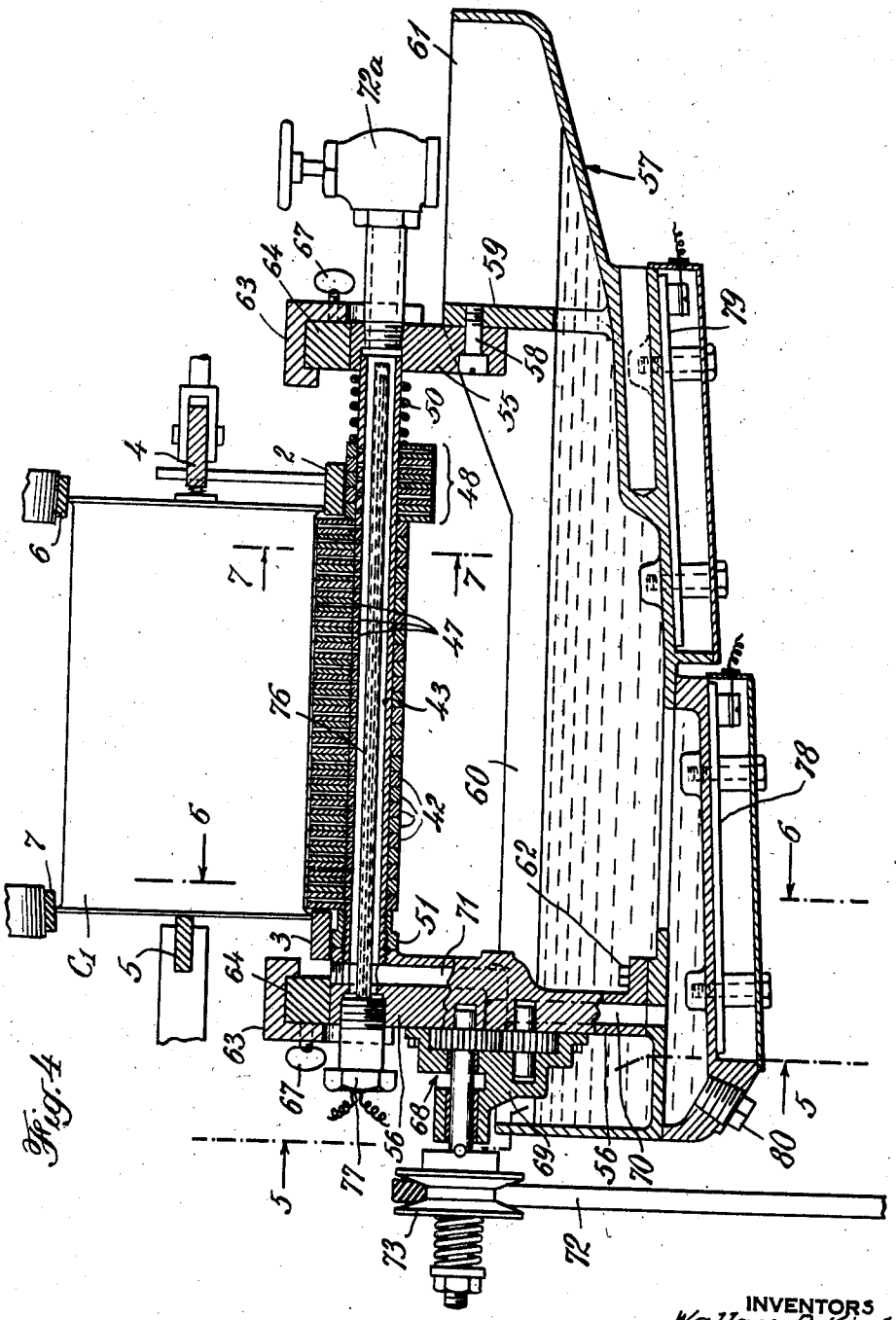

Fig. 4

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LABELING MACHINE

Filed Oct. 24, 1940 4 Sheets-Sheet 4

Fig. 5,

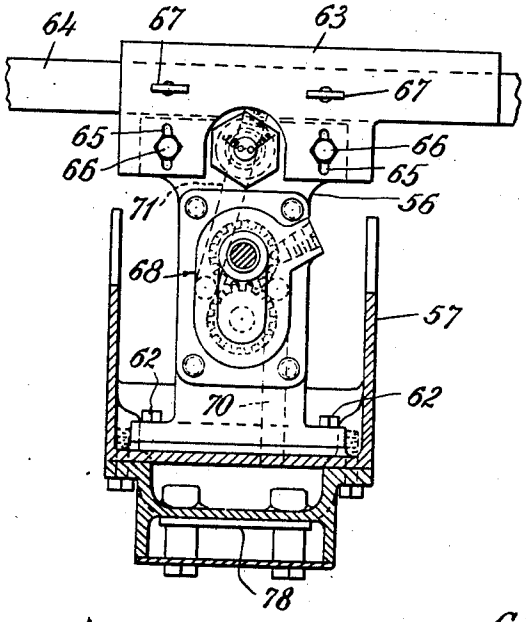



Fig. 6,

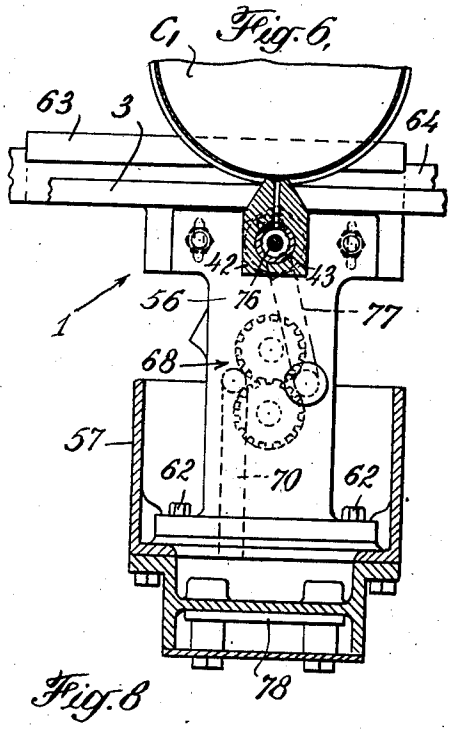



Fig. 7,

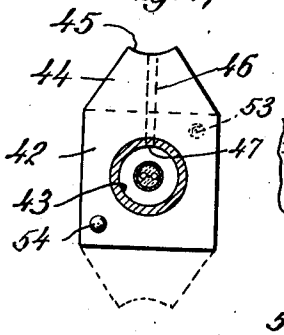
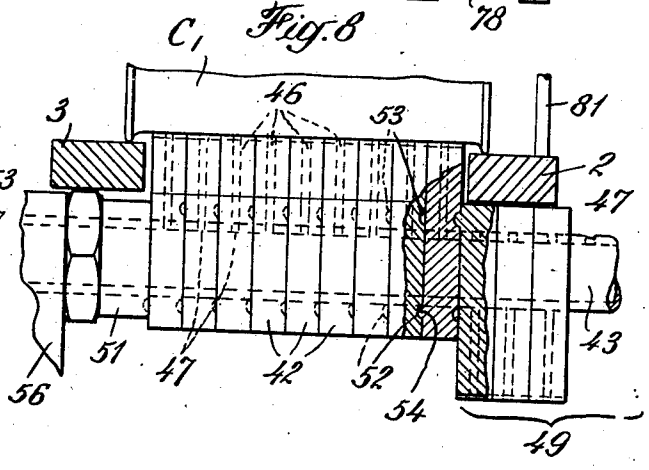



Fig. 8

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Patented Feb. 22, 1944

2,342,284

# UNITED STATES PATENT OFFICE

2,342,284

## LABELING MACHINE

Wallace D. Kimball, Jackson Heights, N. Y., and Edgar Ardell, Middletown, Conn., assignors to Standard-Knapp Corporation, Portland, Conn., a corporation of New York

Application October 24, 1940, Serial No. 362,598

23 Claims. (Cl. 91—43)

This invention relates to labeling machines, and more particularly to an improved mechanism for applying the adhesive or "pick-up gum," as it is referred to in the industry, to the can, bottle, or other round article to be labeled, by which the forward end of the label is caused to adhere thereto.

Heretofore the mechanism for applying the pick-up gum in almost universal use consisted of a series of discs secured in spaced relation on a shaft and rotated so that their lower portions dipped into a body of liquid adhesive which was carried upwardly on the discs and applied to the rolling articles, as they passed in contact with the upper peripheries of the discs. The journals or bearings for this shaft were made a part of the adhesive receptacle or "gum-pot" in order to mount the discs in proper relation both to the body of liquid and the can runway. Such a construction was expensive to manufacture and in addition could not be readily adapted to machines for labeling both large and small cans. Consequently it was necessary to manufacture several entirely different sizes of gum-applying apparatus for use on labeling machines of various size. Moreover, no adjustability was possible except by shifting the discs longitudinally on their shaft and this was inconvenient to do and time-consuming. It was therefore customary merely to mount the discs in fixed relation and so spaced as to accommodate a few standard can sizes without adjustment. Another disadvantage of the disc type of gum applier was that the distribution of the gum could not be controlled to correspond to the difference in size of can. Further, it was usually necessary to adjust both of the labeling machine guide rails in order to center the can with respect to the gum-applying discs.

The primary object of the invention is the provision of an improved labeling machine and especially to provide a pick-up gum applying mechanism which is adaptable for use in labeling machines differing considerably in size so that the same mechanism can be used for substantially all sizes of labeling machines, thereby reducing the cost of manufacture.

Another object of the invention is to provide a pick-up gum applying mechanism which, when supplied in a labeling machine for labeling short cans, can, if desired later on, be modified so as to apply gum to taller cans, by the mere multiplication or addition of parts which are duplicates of those supplied with the machine as originally constructed.

It is also an object of the invention to provide a pick-up gum applying mechanism which has particular utility in an adjustable labeling machine wherein it is desired to label articles of widely differing size both in diameter and height or length.

Another object of the invention is to provide a pick-up gum applying mechanism which can be readily and quickly adapted to apply gum in different patterns to suit the particular character of the article to be labeled, for example, so as to apply the pick-up gum in a continuous bead or stripe, in a series of broken stripes, or in a series of spots or dots, covering so much of the length of the can as is beneath the label, or distributing the gummed areas as desired to suit the particular labeling conditions.

A still further object of the invention is to provide a gum-applying mechanism which is capable of adjustment for cans of different height and at the same time maintain substantially the same distribution of the gummed areas on both tall and short cans and which can be used with labeling machines in which the cans lie on their sides in horizontal position as they progress through the machine as well as machines in which the cans are held in upright or vertical position as they move through the machine.

Another object of the invention is to provide an adjustable gum-applying mechanism in which the desired adjustment for cans of different height can be provided accompanied by a corresponding adjustment of one only of the can supporting rails and guide rails.

Another object of the invention is to provide a labeling machine in which a can supporting rail and its corresponding can guide rail are adjustable simultaneously for cans of different height.

The invention will be understood from a consideration of the accompanying drawings, by way of example illustrating the invention applied to a horizontal labeling machine. In these drawings:

Fig. 1 is a central vertical section through the central portion of a labeling machine embodying the invention, the section being indicated by line 1—1 of Fig. 2;

Fig. 2 is a plan view of the central portion of the labeling machine;

Fig. 3 is a vertical section indicated by broken line 3—3 in Fig. 1, looking toward the left as indicated by the arrows and showing certain parts to the left of the section lines and not illustrated in Fig. 1;

Fig. 4 is an enlarged vertical central section

through the pick-up gum applying mechanism taken as indicated by line 4—4 of Fig. 2 but with certain parts of the machine omitted;

Fig. 5 is a vertical section as indicated by line 5—5 of Fig. 4;

Fig. 6 is a similar section indicated by line 6—6 of Fig. 4;

Fig. 7 is an enlarged sectional view taken as indicated by line 7—7 of Fig. 4, but with parts of the labeling machine omitted; and

Fig. 8 is a fragmentary enlarged view partly in elevation and partly in section of the gum-applying device of Fig. 4 adjusted to accommodate a short can.

Referring now to the accompanying drawings, the present improvements will be described in connection with a labeling machine of the kind set forth in Letters Patent 2,206,964, granted July 9, 1940, to Wallace D. Kimball, Cornelius I. Braren and John H. Mosley, to which reference may be had for the details of its construction. Cans to be labeled pass through the machine from left to right as viewed in Figs. 1 and 2, usually in a substantially continuous stream but in spaced relation to one another as shown at $C^1$ and $C^2$. The cans, until they pass the pick-up gum applying apparatus, indicated generally by numeral 1, are supported upon a pair of conveying rails 2 and 3, spaced so as to locate them beneath the beads of the cans.

Guide rails 4 and 5 which engage the ends of the cans are arranged to confine the cans to the desired path throughout the machine. The cans are propelled forward by means of a pair of endless belts 6 and 7, the lower reaches of which bear upon the upper portions of the can beads, spring pressed rollers 8 being provided to supply the necessary downward pressure. After the cans receive the pick-up gum they pass off the ends of rails 2 and 3 and over the top of a stack 8' of labels. The front edge of the uppermost label is picked up by the gum on the cans so that as the can proceeds, the label is wrapped about it.

The rear or lap end of the label is provided with paste by means of a lap end pasting mechanism, indicated generally by numeral 9, and which includes a paste applying belt 10 which carries paste from receptacle 11 onto the label. As the can passes the right hand end of the label stack the pasted end of the label is withdrawn from beneath a curling bar 12 and placed in overlapping relation to the front end of the label on the can. The can then rolls over a smoothing pad 13 and thence out of the machine.

The labeling machine is adjustable to accommodate cans varying widely both in diameter and in height or length. Hence it is necessary to adjust the vertical distance between the lower reaches of the driving belts 6 and 7 from the rails 2 and 3; also to adjust the horizontal separation or spacing of these rails.

In order to adjust the machine for cans of different diameter, the upper part of the machine carrying the belts 6 and 7 is made adjustable vertically with respect to the remainder of the machine. Thus the upper part of the machine is supported upon four posts, two of which, 14 and 15, are illustrated in the drawings. The two posts at the opposite end of the machine are similar and are similarly adjustable. Posts 14 and 15 support the superstructure illustrated in Fig. 3 which carries shaft 16 upon which pulleys 17 and 18 for the driving belts 6 and 7 at this end of the machine are mounted. On this superstructure also is the driving motor 19 of the machine which through the belt and toothed gearing shown in Fig. 3 rotates shaft 16 continuously. The can-propelling belts 6 and 7 serve to drive their two supporting pulleys at the opposite end (not shown) of the machine and through them, by means of suitable connections (not shown), a continuously rotating shaft 20 which extends lengthwise along the rear of the machine and also the driving shaft 21 for the lap end pasting mechanism. These driving connections are all illustrated and described in detail in the previously mentioned patent.

For the purpose of raising and lowering the upper portion of the machine to adjust for can diameter, posts 14 and 15 are arranged to slide vertically in the frame 22 of the machine and are provided at their lower ends with rack teeth 23 which engage rack pinions 24 at the opposite ends in a cross shaft 25. This cross shaft is rotatable by means of a hand wheel 26 through worm gearing 27. Shaft 28 upon which hand wheel 26 is mounted extends to the opposite end of the machine where it is connected to raise and lower the supporting posts at that end by means of operative connections similar to those just described, these also being set forth in detail in the above mentioned patent.

Can-supporting rails 2 and 3 are mounted on cross members 29 and 30 (Fig. 2) in such a way as to be fixed in non-adjustable position vertically. Consequently the entire adjustment for can diameter is obtained by turning the hand wheel 26 which raises or lowers the driving belts 6 and 7 with respect to these rails. It is unnecessary and undesirable to change the position of guide rails 4 and 5 unless there is a very large change in the diameter of the cans to be labeled. Consequently the spring mounting mechanism indicated generally by numeral 31 is provided in connection with guiding rail 4, and the position of this rail is determined by the adjustment of screw 32 so that this rail is adjusted independently of the height of belts 6 and 7.

In order to adjust the machine for variation in can height or length, supporting rail 3 and guide rail 5 are mounted in fixed lateral or horizontal position while supporting rail 2 and guiding rail 4 can be readily adjusted closer to or farther away from the other two rails 3 and 5. Also belt 6 is adjusted laterally with respect to belt 7. To effect this pulley 17 is mounted for axial adjustment on shaft 16, and this adjustment occurs simultaneously with the axial movement of the pulley (not shown) at the opposite end of the machine corresponding to pulley 17.

Guiding rail 4 is held adjustably in position by means of set screws 33 one of which is shown in Fig. 3 and supporting rail 2 by means of the holding screws 34 (Fig. 2) which project through slots 35 in the cross members 29 and 30. The simultaneous adjustment of these two rails will be described later on. The lateral adjustment of belt 6 with respect to belt 7 is obtained by means of a hand wheel 36 on shaft 37. A bracket 38 is threaded upon this shaft and is operatively connected so as to slide pulley 17 axially of shaft 16 and at the same time to shift the side bar 39 which supports the spring pressed pulleys 8 (Fig. 1). Shaft 37 is connected by means of helical gearing 40 (Figs. 3) and a longitudinal shaft 41 with a similar shaft (not shown) on the opposite end of the machine which similarly and simultaneously adjusts the position of the opposite end of driving belt 6 and side bar 39, all of

which is set forth completely in the above-mentioned patent.

Coming now to the improved gum-applying mechanism of our present invention, this comprises a series of sectional elements or segments 42 (see particularly Figs. 4–8). These segments are supported upon a hollow tube 43 which is adjustable both vertically and longitudinally of the machine so as to bring the segments into proper position to apply the gum to the surface of the cans. The gum is supplied under pressure by mechanism to be described to the interior of tube 43 and thence through suitable apertures in the segments to the surface of the can. Suitable means are provided for holding the segments clamped together in operative alinement on tube 43 and the segments are so arranged that they can be turned to either of two positions on the tube, namely, to upright or operative position, or to a downward and inoperative position so that the extent or pattern of the gum to be applied to the cans can be varied as desired to suit the height or length of the can as well as the can diameter.

Segments 42 are of generally square shape as illustrated in Fig. 7 and have a central aperture which snugly fits the surface of tube 43. Each segment is provided with a tapering projection 44 terminating in an adhesive-applying surface or retaining pocket 45. A small passageway 46 extends from the central aperture or bore of the element to pocket 45 and when the elements are in upright operative position these passageways 46 are in alinement with small apertures 47 in tube 43 so that the adhesive may be delivered upwardly to the respective pockets 45. When an element is turned to inoperative position its passageway 46 moves out of alinement with the corresponding aperture 47, thereby cutting off and preventing the adhesive from entering the passageways.

Segments 42 are of uniform thickness, preferably about ¼ inch, and have flat parallel sides. Hence when the segments are turned to operative position their individual pockets 45 which extend from side to side of each element are arranged in alinement with one another, thereby providing a continuous channel over a length corresponding to the number of segments adjacent one another. In this way the adhesive can be applied to the can to various extents and in a variety of formations or patterns. For example, as shown in Figs. 4 and 8, by turning a sufficient number of segments to operative position to extend the length or height of a can, the adhesive may be applied in the form of a narrow continuous bead. Moreover, because of the fact that the segments are so constructed as to permit adjustable rail 2 to be moved over the top thereof when the segments are turned to inoperative position, as shown, for example, at 48 in Fig. 4, and 49 in Fig. 8, the application of the adhesive can be made to extend into close proximity to the beads at the opposite ends of the cans.

Because of the flat cooperating surfaces of segments 42, they can be readily held clamped against one another on tube 43 by any suitable clamping means, as, for example, the spring 50, so that the entire set of segments is clamped together as a unit against a nut or collar 51 at the opposite end.

In order to facilitate the movement of the individual units into and out of operative position and to lock them in alinement with one another in either position, each of the segments is provided on one face, for example the right hand face, with two small depressions 52 and 53 located 180° apart on opposite sides of tube 43. The left hand face of each member is provided with a small protuberance 54 which is adapted to fit in one or the other of the two depressions 52 of the adjacent segment. It will be understood that when a segment 42 is rotated on tube 43 protuberance 54 is forced out of one of the depressions 52 or 53, spring 50 yielding somewhat to permit a slight axial movement of the segments. Upon completion of the movement of the segment protuberance 54 snaps into the other depression 52 or 53 as the case may be and locks the segment.

The gum-applying device just described, together with the necessary adhesive receptacle and pump for the adhesive and heaters for maintaining the adhesive at the right temperature for the desired degree of fluidity are all mounted together as a single unit and suspended in adjustable position both vertically and longitudinally of the labeling machine. For this purpose the segment-supporting tube 43 is threaded at its front end into a member 55 and at its rear end into a member 56. The adhesive receptacle 57 is secured to these members 55 and 56, member 55 being attached by screws 58 to a cross partition 59 in the paste receptacle which divides the receptacle into a main portion 60 and a filling portion 61 which is somewhat wider (Fig. 2) for convenience in replenishing the adhesive. Member 55 at the rear of the labeling machine is secured at its lower end to the bottom of the adhesive receptacle 57 by means of cap screws 62.

Members 55 and 56 which support the entire unit are suspended by means of hanger members 63 from two bars 64 which extend along each side of the machine between cross members 29 and 30.

In order to adjust the gum-applying unit so as to position the gum-retaining pockets 45 of the segments 42 at the proper elevation with respect to rails 2 and 3 to deposit the gum on the cans, vertical slots 65 are provided in the hanger members so that vertical adjustment may be made by loosening the attaching screws 66.

It is necessary to adjust the gum applier longitudinally of the labeling machine so that one revolution of a can will bring the gum deposited on its surface by the gum applier into contact with the front end of the label. Hence whenever the size of the cans to be labeled is changed it is necessary to shift the gum-applying apparatus lonigtudinally to the correct distance in front of the label stack. To permit this the hangers 63 are arranged to slide along the supporting bars 64 and are secured in adjusted position by means of a pair of thumb screws 67.

The adhesive is delivered to the interior of tube 43 under the desired pressure by means of a gear pump 68 comprising a pair of coacting gears arranged in a casting 69 that is secured against the rear side of member 56. The inlet to this pump is through a cored passageway 70 in member 55 which extends upwardly from a sump at the rear end of the adhesive receptacle 57. The adhesive is delivered at one side of the intermeshing gears by this passageway and a second delivery passageway 71 extends from the opposite side of the gears to the rear end of tube 43. At the front end of tube 43 a regulating valve 72a is provided which discharges the surplus adhesive into the filling portion of the adhesive receptacle where it returns beneath par-

tition member 59 to the main body of adhesive. By adjusting valve 72a the rate of delivery of adhesive through the apertures 46 to the adhesive retaining pockets 45 of the gum applier segments can be regulated so that between the passage of successive cans over the gum applier fresh adhesive will be delivered in the proper quantity. In this way the amount of adhesive applied to each can can be controlled.

The gear pump 68 is driven by means of a belt 72a and pulley 73 preferably of the slip type such as illustrated by way of example in Fig. 4 from a driving pulley 74 on shaft 75 which is driven through worm gearing from shaft 20 previously referred to.

In order to maintain the adhesive at the desired operating temperature, at the time it is applied to the cans an electric heating unit 76 extends from the rear of the machine throughout the length of tube 43. This unit projects into the tube from a supporting plug member 77 which is threaded into an aperture in member 56 opposite the end of tube 43. By means of this heater the entire set of adhesive-applying segments is maintained at the desired temperature, thereby insuring that the adhesive is at such temperature when it is deposited upon the cans.

In order to maintain the body of adhesive in the receptacle 57 at suitable temperature, two heating units 78 and 79 are provided on the bottom of the receptacle. One or both of these units can be used, depending upon the conditions. A drain plug 80 is provided in the sump at the rear end of the adhesive receptacle for draining the device.

A further feature of our invention is the provision of simultaneous adjustment of the can guide rail 4 and the can supporting rail 2 which reduces the time required to change over a labeling machine to operate on different size cans. This is accomplished by means of a pair of upright pins 81 which project up from rail 2 and extend slidably through apertures in guide rail 4. By loosening the screws 32 of guide rail 4 (Fig. 3) together with the screws 34 (Fig. 2) by which rail 2 is secured in adjusted position, the movement of rail 2 to its new position will then carry with it, through the pins 81, the guide rail 4. It is only necessary to again tighten screws 34 and 32 and the adjustment is completed.

With the improved gum applier of our invention a considerable amount of the expensive part of labeling machines as previously built has been limited because of the fact that our gum applier is adapted for use on labeling machines differing greatly in size. All of the parts except the supporting tube 43 and the adhesive receptacle 57 can be used for all sizes of labeling machines and it is only necessary to provide about two sizes of adhesive receptacles to meet all conditions. The segments 42 being identical it is only necessary to provide as many as required for use on the tallest can which is expected to be labeled in the machine. If later on the user of the machine should desire to change it over to handle still larger cans, it is only necessary to supply him with additional segments and perhaps a longer tube 43. Our improved gum applier is therefore of substantially universal application.

For use on adjustable labelers where it is desired to label first a quantity of tall cans and then a quantity of short ones, or vice versa, our improved gum applier is advantageous because its adjustment for the change in can size can be accomplished almost instantaneously and further because the extent or pattern of the adhesive applied can be uniform in proportion to the size of the can whereas with previous types of gum appliers this was not possible or difficult of attainment.

The improved gum applier is adapted for use in labeling bottles or other articles as well as cans and can be used for so-called "spot labeling" as well as where the label is wrapped entirely around the article. In some instances it is desired to apply the gum in a continuous stripe or bead extending substantially from one end of the can to the other, in which case the improved gum applier will be used as previously described.

In other cases it may be desirable to apply the adhesive in a series of stripes. To do this, referring to Fig. 4, the first three segments 42, for example, from the left might be placed in upright operative position and the next three turned down to inoperative position. The following three would be turned up and so on throughout the length of the can. If it should be desired to apply the gum in a series of spots, alternate segments will be left up in operative position and the intermediate segments turned downwardly. Thus the extent or area of gum application and the pattern employed is subject to a considerable degree of variation.

It will be understood that changes may be made in our invention as illustrated and described above without departing from the spirit or exceeding the scope of the invention which is defined in the appended claims.

We claim:

1. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments on the tube, each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, means for securing the segments upon the tube with the passageways thereof in registry with the respective apertures of the tube, and means for supplying adhesive to the interior of the tube.

2. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments thereon each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, a stop for positioning one end of the series of segments so as to cause the passageways in the segments to register with the respective apertures of the tube, a spring bearing upon the opposite end of the series of segments to press them into engagement with one another and permitting the individual segments to be rotated on the tube into and out of operative position to vary the extent or pattern of the adhesive, and means for supplying adhesive to the interior of the tube.

3. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments thereon each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, a stop for positioning one end of the series of segments so as to cause the passageways in the segments to register with the respective apertures of the tube, a spring

bearing upon the opposite end of the series of segments to press them into engagement with one another, and means for supplying adhesive to the interior of the tube, the segments being individually rotatable on the tube to inoperative position thereby cutting off the connection of their orifices with the interior of the tube and means for locking the segments in alinement with one another in their operative position.

4. In a labeling machine, an adhesive applier comprising a rod-like support, a plurality of similar segments thereon each having an adhesive applying surface and being apertured to be received upon said support, means for yieldingly pressing the segments against one another, the segments being mounted so as to be individually rotatable on said support to bring the adhesive-applying surfaces thereof into or out of operative position, the segments having cooperating formations for locking them in one or the other of said positions, and means for supplying adhesive to said adhesive-applying surfaces when the segments are in operative position.

5. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments thereon each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, a stop for positioning one end of the series of segments so as to cause the passageways in the segments to register with the respective apertures of the tube, a spring bearing upon the opposite end of the series of segments to press them into engagement with one another, and means for supplying adhesive to the interior of the tube, the segments being individually rotatable on the tube to inoperative position thereby cutting off the connection of their orifices with the interior of the tube and said segments having cooperating formations for locking them with their orifices in alinement with one another.

6. In a labeling machine, an adhesive applier comprising a plurality of similar segments each having an adhesive-retaining pocket, means for clamping these segments against one another with the pockets thereof in alinement forming a continuous adhesive-retaining channel, and means for supplying adhesive to said channel.

7. In a labeling machine, an adhesive applier comprising a plurality of similar segments each having an adhesive-retaining pocket, yielding clamping means for pressing these segments against one another, the segments being mounted so as to be individually adjustable into and out of operative position and when in operative position the pockets thereof being in alinement forming a continuous adhesive-retaining channel, and means for supplying adhesive to said channel.

8. In a labeling machine, an adhesive applier comprising a plurality of similar segments each having an adhesive-retaining pocket, means for supporting the segments in alinement, means for yieldingly pressing the segments against one another, the segments being mounted so as to be individually adjustable to bring the pockets thereof into or out of operative position in alinement with one another, the pockets of a plurality of adjacent segments when in alinement forming a continuous adhesive-retaining channel, and means for supplying adhesive to said channel.

9. In a labeling machine, an adhesive applier comprising a plurality of similar segments each having an adhesive-retaining pocket, means for supporting the segments in axial alinement, means for yieldingly pressing the segments against one another, the segments being mounted so as to be individually rotatable about their common axis to bring the pockets thereof into or out of operative position in alinement with one another, the segments having cooperating formations for locking them in one or the other of said positions, the pockets of a plurality of adjacent segments when in alinement with one another forming a continuous adhesive-retaining channel, and means for supplying adhesive thereto.

10. In a labeling machine, an adhesive applier comprising a hollow tube, a plurality of similar plate-like segments thereon each having parallel faces and an adhesive-exuding orifice in its edge connected with the interior of the tube, means for clamping said segments face against face to form a solid mass, means for supplying adhesive to said tube, and a heating device within said tube to maintain the adhesive at the desired temperature at the point of application to the articles.

11. In a labeling machine, a frame, a can runway therein comprising a pair of parallel can-supporting rails spaced apart to engage the cans adjacent their opposite ends, means for laterally adjusting one of said rails with respect to the other to accommodate cans of various height, an adhesive applier associated with the rails comprising a plurality of similar segments each having an adhesive-applying orifice, means for supporting the segments in axial alinement, the segments being individually rotatable about their common axis to project the orifices thereof upwardly between said rails to engage the cans thereon, the segments being also rotatable to inoperative position and the adjustable rail being movable into position over such segments in order to support the cans.

12. In a labeling machine, a frame, a can runway therein comprising a pair of parallel can-supporting rails spaced apart to engage the cans adjacent their opposite ends, one of said rails being laterally adjustable with respect to the other to accommodate cans of various heights, an adhesive applier associated with the rails comprising a plurality of similar segments each having an adhesive-applying orifice, means for supporting the segments in axial alinement, the segments being individually rotatable about their common axis to project the orifices thereof upwardly between said rails to engage the cans thereon, the segments being also rotatable to inoperative position and the adjustable rail being movable into position over such segments in order to support the cans, a can guide rail above the adjustable supporting rail, and means connecting the two rails for common adjusting movement.

13. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments thereon each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, a stop for positioning one end of the series of segments so as to cause the passageway in the segments to register with the respective apertures of the tube, a spring bearing upon the opposite end of the series of segments to press them into engagement with

one another and means for supplying adhesive to the interior of the tube, the segments being individually rotatable on the tube to inoperative position thereby cutting off the connection of their orifices with the interior of the tube.

14. In a labeling machine, an adhesive applier comprising a hollow tube having a series of alined spaced radial apertures, a series of similar segments thereon each having a bore to fit the exterior of the tube, said segments each having an adhesive-exuding orifice and a passageway connecting the same with said bore, a stop for positioning one end of the series of segments so as to cause the passageway in the segments to register with the respective apertures of the tube, a spring bearing upon the opposite end of the series of segments to press them into engagement with one another and means for supplying adhesive to the interior of the tube, the segments being individually rotatable on the tube to inoperative position thereby cutting off the connection of their orifices with the interior of the tube, means for locking the segments in alinement with one another in their operative position and means for locking them in inoperative position.

15. In a labeling machine, an adhesive applier comprising a hollow tube, a plurality of similar plate-like segments thereon each having parallel faces and an adhesive-exuding orifice in its edge connected with the interior of the tube, means for supplying adhesive to said tube, means for clamping said segments face against face to form a solid mass, and a heating device in heat-transferring relation to said tube to maintain the adhesive at the desired temperature at the point of application to the articles.

16. In a labeling machine, a frame, a can runway therein comprising a pair of parallel can-supporting rails spaced apart to engage the cans adjacent their opposite ends, an adhesive applier associated with the rails comprising a plurality of similar segments each having an adhesive-applying orifice, means for supporting the segments in axial alinement, the segments being individually rotatable about their common axis to project the orifices thereof vertically above their common axis and between said rails to engage the cans thereon, means for locking them in said position the segments being also rotatable to inoperative position, and means for supplying adhesive to said orifices when in operative position.

17. In a machine for labeling articles, a frame, a can runway therein including a pair of parallel can-engaging rails, and an adhesive applier comprising a support arranged transversely of said rails, a plurality of segments movably mounted on said support and each having an adhesive-retaining pocket, means for locking said segments in either of two positions on said support, the segments when in one of said positions having their adhesive-retaining pockets in alinement with one another between said rails to be operatively engaged by a can, and when in said other locked position the segments having their adhesive-retaining pockets withdrawn from operative position with respect to said rails, and means for supplying adhesive to said pockets.

18. In a machine for labeling articles, a frame, a can runway therein including a pair of parallel can-engaging rails and an adhesive applier comprising a support arranged transversely of said rails, a plurality of segments movably mounted on said support and each having an adhesive-exuding orifice, means for locking said segments in either of two positions on said support, the segments when in one of said positions having their adhesive-exuding orifices in alinement with one another between said rails to be operatively engaged by a can, and when in said other locked position the segments having their adhesive-exuding orifices withdrawn from operative position with respect to said rails, and means for supplying adhesive to said orifices.

19. In a labeling machine, an adhesive applier comprising a rod-like support, a plurality of similar segments thereon each having an adhesive-applying surface and being apertured to be received upon said support, means for yieldingly pressing the segments against one another on said support, the segments being mounted so as to be individually rotatable on said support to bring the adhesive-applying surfaces thereof into and out of operative position, the segments having cooperating formations releasable from one another by axial shifting of the segments for locking them in one or the other of said positions, and means for supplying adhesive to said adhesive-applying surfaces.

20. In a labeling machine, an adhesive applier comprising a rod like support, a plurality of similar segments thereon each having an adhesive-applying surface and being apertured to be received upon said support, means for yieldingly pressing the segments against one another on said support, the segments being mounted so as to be individually rotatable on said support to bring the adhesive-applying surfaces thereof into and out of operative position, each segment having two depressions in one face disposed at the same radial distance from the center of its aperture and 180° apart and one protuberance on the opposite face at the same radial distance as said depressions, the coaction of said protuberance with one or the other of said depressions serving to lock the individual segments in or out of operative position, and means for supplying adhesive to said adhesive-applying surfaces.

21. In a labeling machine, a frame, a can runway therein comprising a pair of parallel can-supporting rails spaced apart to engage the cans adjacent their opposite ends, means for laterally adjusting one of said rails with respect to the other to accommodate cans of various heights, an adhesive applier associated with the rails comprising a rod-like support, a plurality of similar segments each apertured to be received upon said support and turnable thereon into and out of operative position, each of said segments having a long side provided with an adhesive-applying orifice and a short side, said segments when turned with their long sides towards the rails being in operative position to apply adhesive to cans rolling along the supporting rails, and when turned with their short sides towards the rails permitting the adjustable rail to be moved into position adjacent said short sides in order to support the cans, and means for clampingly holding said segments in either of said positions.

22. In a labeling machine, an adhesive applier comprising a rod-like supporting member, a plurality of similar segments each having a transverse circular supporting aperture and an adhesive-applying surface, the segments being mounted side by side upon said rod-like member, said member passing through the apertures thereof, the segments being individually adjustable by rotation on said rod-like member to place their adhesive-applying surfaces in or out

of operative position to vary the extent or pattern of the adhesive applied to the articles, clamping means to hold the segments fixed in adjusted position and means for supplying adhesive to said adhesive supplying surface.

23. In a labeling machine an adhesive applier comprising a rod-like supporting member, a plurality of similar segments each having a transverse circular supporting aperture and an adhesive retaining pocket, the segments being mounted side by side upon said rod-like member, said member passing through the apertures thereof, the segments being individually adjustable by rotation on said rod-like member to place said pockets in or out of operative position, clamping means to hold the segments fixed in adjusted position, the pockets of a plurality of adjacent segments when in operative position forming a continuous adhesive retaining channel, and means for supplying adhesive to said channel.

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