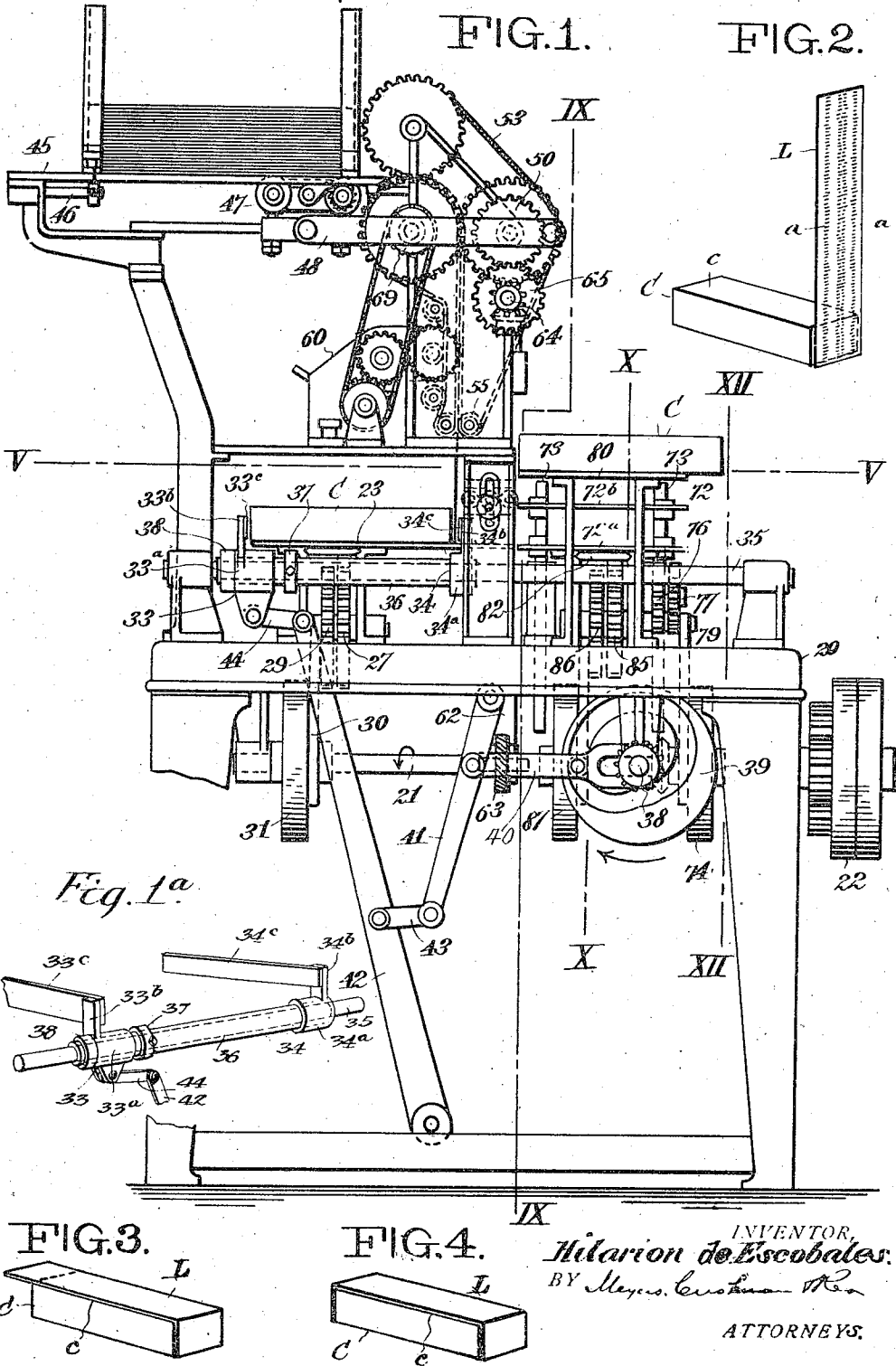


1,297,664.

Patented Mar. 18, 1919.

4 SHEETS—SHEET 1.



1,297,664.

Patented Mar. 18, 1919.
 4 SHEETS—SHEET 2.

FIG. 9.

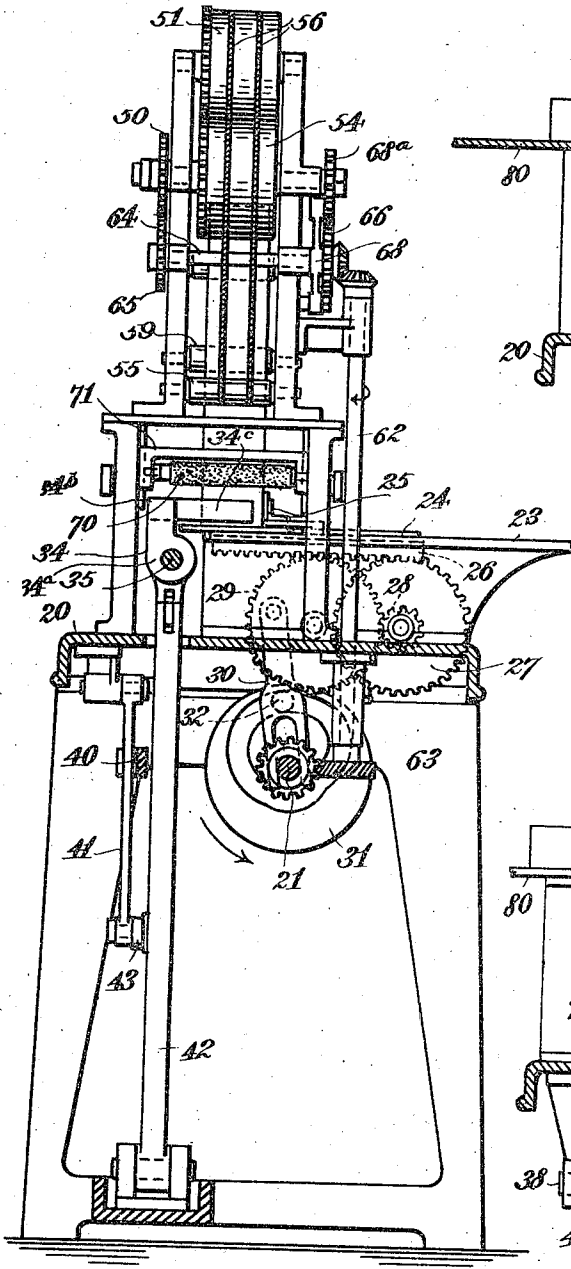


FIG. 10.

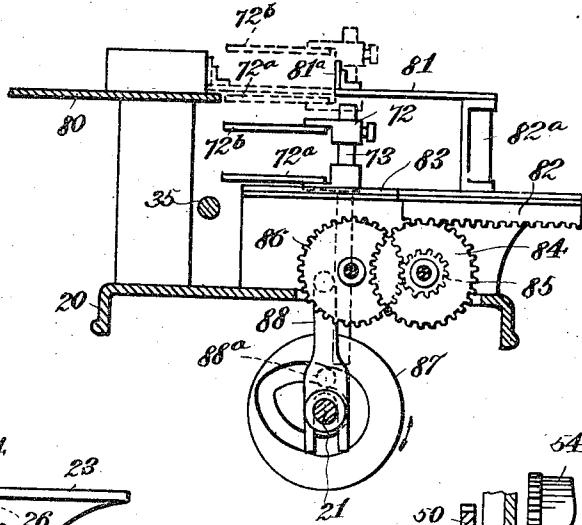


FIG. 11.

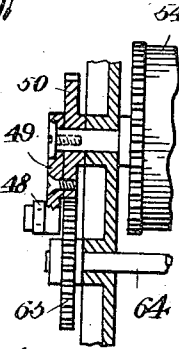
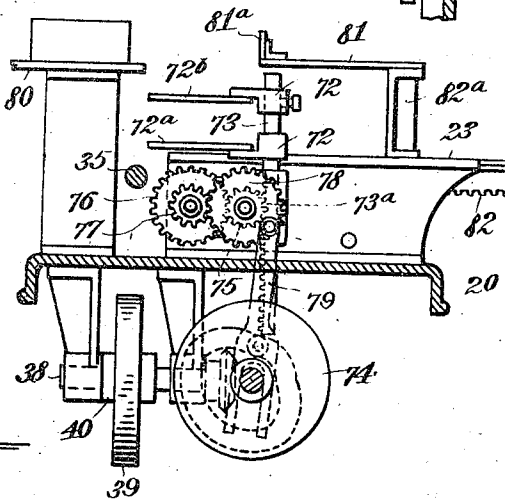


FIG. 12.



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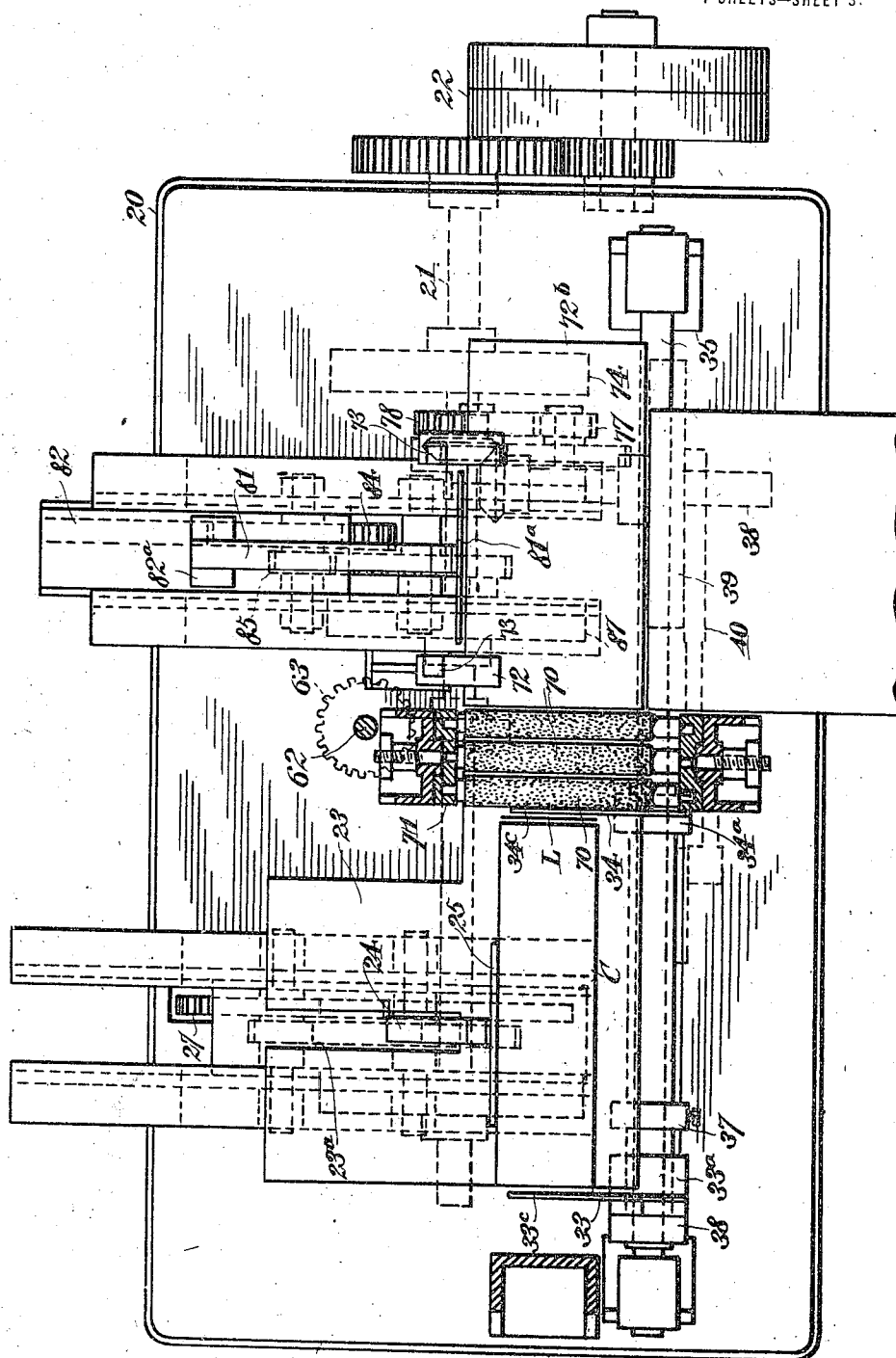
H. DE ESCOBALES.
LABELING MACHINE.
APPLICATION FILED OCT. 26, 1917.

Patented Mar. 18, 1919.

4 SHEETS—SHEET 3.

1,297,664.

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1,297,664.

Patented Mar. 18, 1919.

4 SHEETS—SHEET 4.

FIG. 6.

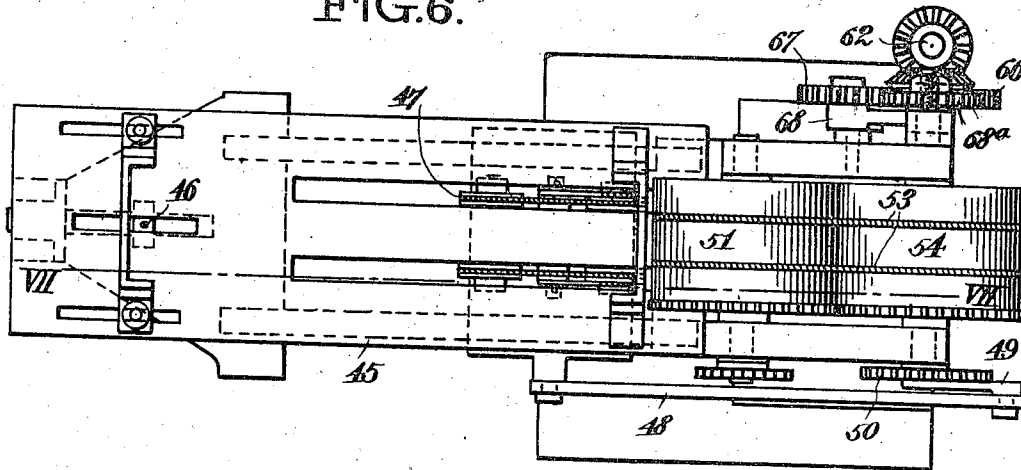


FIG. 7.

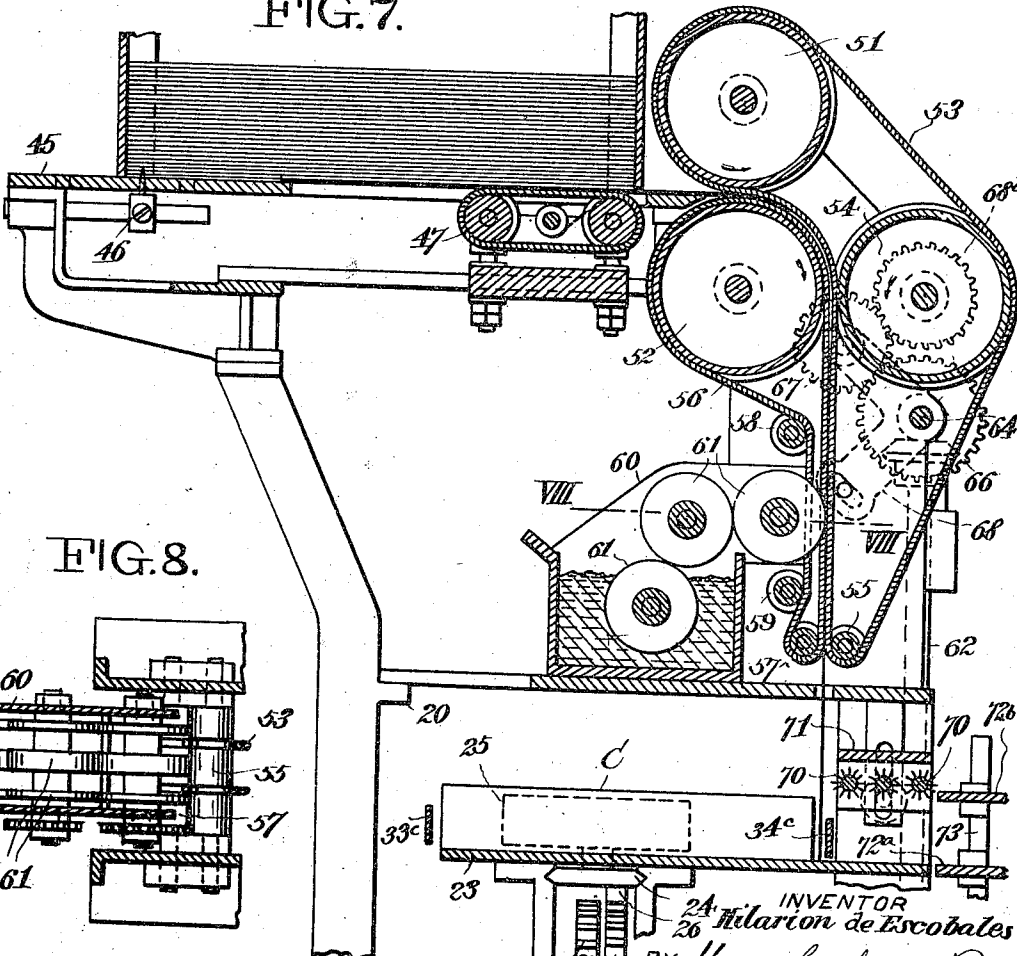
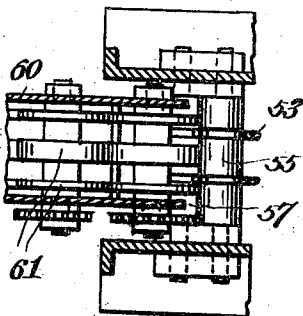


FIG. 8.



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UNITED STATES PATENT OFFICE.

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LABELING-MACHINE.

1,297,664.

Specification of Letters Patent.

Patented Mar. 18, 1919.

Application filed October 26, 1917. Serial No. 198,724.

To all whom it may concern:

Be it known that I, HILARION DE ESCOBALLES, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Labeling-Machines, of which the following is a specification.

This invention relates to improvements in labeling machines, pertaining more particularly to machines adapted to apply labels to a plurality of faces of an angular container, carton, box, or the like.

The present invention is designed more particularly for the purpose of completing packages of more or less angular configuration, the container being of suitable form and generally adapted to have one of its faces opened to provide access to the interior of the container. Instead of wrapping containers of this type, it has become the practice to retain the container closed by the use of a label an intermediate portion of which is applied on the face which is intended to be opened, the ends of the label being applied to opposite ends of the container. In other words, the label has a length greater than the length of a container longitudinal wall, and the surplus ends of the label are carried over the adjacent ends of the container. Packages of this type have heretofore been labeled manually, and, so far as I am aware, I am the first to produce an apparatus adapted to provide this labeling action automatically. The present invention is designed to provide this automatic labeling action in a simple and efficient manner, the apparatus being of such type as to provide for comparatively large capacity operations.

In addition, the present invention also contemplates labeling operations in the formation of packages which differ in size, thus dispensing with the necessity of employing individual and differently proportioned apparatus for each size of package which is to be labeled in this manner. The present invention is designed in such manner that the changes required when a container of different size is to be labeled will be confined to a minimum number of points, thereby making it possible to quickly change the machine to accommodate for the different sizes.

To these and other ends, the nature of which will be readily understood as the in-

vention is hereinafter disclosed, said invention consists in the improved construction and combination of parts hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims.

In the accompanying drawings, in which similar reference characters indicate similar parts in each of the views:

Figure 1 is a front elevation of one form in which the present invention may be embodied.

Fig. 1^a is a detail perspective view of a clamping structure.

Figs. 2, 3 and 4 are perspective views showing the successive operations employed in applying the label to the container.

Fig. 5 is a horizontal sectional view taken on line V—V of Fig. 1.

Fig. 6 is a top plan view of a portion of the apparatus, showing more particularly the label feed mechanism.

Fig. 7 is a sectional view taken on line VII—VII of Fig. 6.

Fig. 8 is a detail sectional view taken on line VIII—VIII of Fig. 7.

Figs. 9, 10 and 12 are sectional views taken respectively on the lines IX—IX, X—X and XII—XII of Fig. 1.

Fig. 11 is a detail sectional view.

Before describing in detail the various mechanisms employed in the embodiment of the apparatus shown in the drawings, I will first give a brief description of the general operation of the apparatus.

Referring first to Figs. 2, 3 and 4, C indicates a container which may be of any desired type, but which is generally of angular configuration when closed. Containers of this type are in general use for many purposes, as for instance in packaging biscuits and crackers, tobacco, products, etc., one of the faces of the package—generally the upper face indicated at c—being adapted to be opened. The wall structure for providing this effect may be of any type, Fig. 2 showing, for the purpose of illustration, an arrangement in which two flaps are employed, each of less width than the width of the face, these two flaps being in overlapping relation. This is but one of a number of forms of container which may be employed.

The label, indicated at L, is preferably of a width substantially equal to the width of the container, although this width of the

label may be less than the width of the container. However, the label preferably has a length equal to the length of the face of the container which is adapted to be closed, plus the vertical length of the two ends of the container, so that when the label is applied, it extends over one end, along the length of the top and down over the opposite end of the container, and the general operation of the apparatus is designed to provide for label application in this manner. Obviously, the label ends may be of a length less than the vertical height of the end of the container, but, as above pointed out, it is preferred that the label practically cover the ends and top of the container. This permits the exposed face of the label to be arranged to carry indications corresponding to individual labels, the face of the label being printed to provide this result, so that the applied label will give the appearance of three distinct labels, although, until the package is broken in opening the container, the three label faces are formed on one structure. As will be understood, when the package is opened, the label will be ruptured along the corners provided at the junction of the vertical and horizontal faces of the container, thus leaving the end labels intact and, where the top wall is of an integral structure, also leaving the top label intact. The label is secured to the respective faces of the container by adhesive, and this is applied to the under face of the label, preferably in the form of stripes *a*, as indicated in Fig. 2.

The general operation of the apparatus provides for advancing a container in a direction transverse to the direction of length of the container, the advance movement placing the container in position between two clamping elements which, during the advance movement of the container, are spread a distance greater than the length of the container, thus permitting the container to be freely positioned between these clamping elements with the elements positioned in opposition to the opposite ends of the container. A label, having the adhesive stripes *a*, is fed downward to locate its lower end between the advance end of the container and the advance clamping element, after which the clamping elements are brought into clamping relation with the container, thus securing the advance end of the label to the advance end of the container.

The container is then advanced in the direction of its length—the direction of label application—the clamped end of the label serving to draw the label by the advancing action of the container, this advancing movement of the container and label carrying the top of the container with the label beneath a plurality of wiping brushes which serve to wipe the intermediate portion of

the label on to the top of the container, the end of the advancing movement of the container leaving the container and label substantially in the condition shown in Fig. 3.

The advancing movement of the container locates it between opposing plates which form a carrier, these plates forming a unit adapted to be reciprocated vertically, the lower position of the unit being that in which it is located when the container is advanced. After the container has been positioned in this carrier, the latter is moved upwardly, and, being particularly positioned relative to the wiping instrumentality, wipes the remaining or trailing end of the label on to the end of the container, producing the result shown in Fig. 4 and completing the labeling operation.

The completed package is removed from the carrier while the latter is in its upper position, this being provided by a reciprocating plunger or pusher operative, when the carrier is in this station, to push the container transversely on to a suitable support or carrier from which it is taken in any suitable way.

Referring more particularly to the drawings, 20 designates a frame in which is mounted a main shaft 21 adapted to be driven from a suitable drive source, indicated as fast and loose pulleys 22, the shaft of the latter being connected to shaft 21 by suitable gear connections, this being simply an illustrative manner of driving shaft 21.

Supported on frame 20 is a table 23 having its top surface preferably spaced above the top of the frame, said table being adapted to support the boxes, containers, or cartons in suitable manner. As shown in Fig. 5, table 23 is provided with a slot 23^a through which extends a support 24 for a vertical plate or plunger 25, the latter having a suitable length and being adapted to be reciprocated back and forth above said table.

Support 24 includes a rack bar 26 extending beneath the top plane of table 23, the support being guided in its rectilinear path by the table in suitable manner. Rack bar 26 coöperates with a gear 27, the shaft of which preferably carries a pinion 28 in mesh with a gear or segment 29, the latter being adapted to be oscillated by means of a pitman 30 having one end pivotally connected to gear or segment 29 and its opposite end adapted to straddle shaft 21. Pitman 30 has its movements controlled by a cam 31 mounted on shaft 21, said cam having a groove into which a member, as for instance a roller 32 carried by pitman 30, extends. By this arrangement, the necessary length of oscillating movement of gear or segment 29 may be obtained by a comparatively small cam structure, and the movements of plunger 25 can

be made with considerable rapidity. By the use of a controlling cam, the timing of plunger movements can be readily controlled, an advantageous arrangement in connection with an apparatus of this type designed to operate in connection with elongated packages and where it is desired to provide mechanism operations positive in character but with mechanism of a simple type. This arrangement, due to the pattern of the cam, provides for an intermittent reciprocating movement for the support, this movement being designed to advance the box, carton, or container from its receiving position on table 23 to a definite position at the front of said table, thus placing it in position for further action.

While I have shown no particular mechanism for locating the boxes, cartons or containers in the path of advancing movement of plunger 25, it will be obvious that any one of a number of well-known arrangements may be employed for the purpose, as for instance a structure which will permit the boxes, cartons or containers to be piled on the table, with suitable mechanism to permit the lower box of the pile to be advanced and the plunger returned, after which the succeeding box is permitted to pass into position in advance of the plunger while the latter is in its rear position, this being a well-known form of positioning mechanism. As will be understood, this plunger and its operating mechanism may be considered as a mechanism for feeding the containers individually.

As will be seen from Fig. 5, this feed of a box or container C locates it between two clamping members 33 and 34, member 33 embodying a sleeve 33^a loosely mounted on an elongated sleeve 36 carried by a rod 35, said sleeve 33^a having a projection 33^b to which a blade 33^c is secured, said projection being located in front of the front edge of table 23 so as to permit a free movement of the sleeve, said blade extending rearwardly from the projection above the top plane of table 23 at a point spaced from the rear end of the positioned container, as shown more particularly in Fig. 1.

Member 34 embodies a collar 34^a mounted at the front end of sleeve 36 and having projection 34^b and blade 34^c, the blade extending rearwardly in advance of and spaced from the forward end of the container, blades 33^c and 34^c forming gripping elements which operate in connection with the opposite ends of the container.

Sleeve 36 carries a collar 37 adjustable in the direction of length of the sleeve for a purpose presently described, and a collar 38 fixedly located in rear of sleeve 33^a.

Sleeve 36 is adapted to be reciprocated on rod 35 by means of the following mechanism:

38 designates a shaft extending at right angles to shaft 21 and driven therefrom, shaft 38 carrying a cam 39 adapted to control the movements of a pitman 40, one end of which is pivotally connected to a lever 41, the opposite end of the pitman being adapted to straddle shaft 38 (Fig. 1). Lever 41 is pivotally connected to a lever 42 by a link 43, the free end of lever 42 being connected to sleeve 33^a by a link 44, this general arrangement causing the desired length of reciprocation of the sleeve with a cam of comparatively small dimensions.

For purposes of explanation it may be noted that the advance end of the label is fed by mechanism presently described—between blade 34^c and the advance end of the container, as shown in Figs. 1, 5 and 7. Therefore, by adjusting the position of collar 37, it will be readily understood that the initial advancing movement of sleeve 33^a is practically with a lost motion effect with respect to sleeve 36, this lost motion permitting blade 33^c to contact with the rear end of the container and advance the container by a pushing action into contact with the positioned label and the exposed face of the latter into contact with blade 34^c, thus clamping the container between the blades with the advance end of the label clamped against the advance end of the container. Stop collar 37 will be adjusted to permit this action, and may be so located that the amount of clamping pressure can be more or less controlled by causing the advance end of sleeve 33^a to contact with the collar after the desired amount of clamping action is had. Obviously, after sleeve 33^a contacts with stop collar 37, further advance causes sleeve 36 to advance, thus providing a unit construction in which both blades are maintained at the desired position, preventing any excess pressure on the ends of the container to damage the latter. Upon the completion of the advance movement of sleeve 36, a short dwell is provided to permit the container to be removed after which lever 42 begins its rearward movement carrying sleeve 33^a into contact with collar 38, sleeve 36 being thus returned to its initial position, placing blades 33^c and 34^c in their non-clamping positions ready to receive the succeeding container. Stop collar 37 is also adjustable for another purpose which will be presently referred to.

The means for feeding the label into position is of the general type disclosed in my companion application filed March 13, 1917, Ser. No. 154,447, the label advancing carrier being modified along the lines disclosed in my companion application filed Sept. 13, 1917, Ser. No. 191,259, due to some extent to the width of the label, certain other changes being made to provide for variations in sizes of labels as indicated hereinafter. For pur-

poses of explaining the present invention, a brief description only of the label feed is made herein.

45 designates a table for supporting the labels in pile formation, the table carrying suitable guides for maintaining the positions of the labels, and, if desired, guides may be adjustable laterally to accommodate for variations in label widths. 46 designates an adjustable device including a needle adapted to penetrate several of the lower sheets of the pile, this device being generally similar to those heretofore employed in connection with sheet segregating operations, 15 the adjustability of the device being designed to accommodate for changes in sizes of labels. 47 indicates a carrier of the general type indicated in said companion applications, embodying a frame carrying parallel rolls arranged in longitudinal alignment and connected by endless bands, preferably of the spring coil type. Carrier 47 is reciprocated by means of a pitman 48 connected to a crank arm 49 (Fig. 6) carried 25 by a gear 50, said gear being rotated as presently described and causing the carrier to be moved back and forth in the direction of label advance. As indicated in the companion applications, the carrier rolls are adapted to be held from rotation during advance movement of the carrier, thus providing a friction action on the lower label of the pile to advance it into the entrance of a band-formed flight, this entrance being provided by a pair of rolls 51 and 52, the carrier rolls being free to rotate during the return movement of the carrier, thus causing the label to be positively advanced and the carrier returned without affecting the label 40 advance or the pile of blanks, the general arrangement being such that after the advance end of the label has entered into the flight, the carrier rolls are unaffected by the advance movement of the label or by the 45 band formed flight.

The band formed flight is of the type disclosed in application Ser. No. 154,447, embodying a plurality of endless bands 53 mounted on a roll 54, idlers 55 and roll 51, 50 these bands being positioned in parallelism, and more or less opposing endless bands 56 carried by idlers 57 and roll 52 passing over idlers 58 and 59, these two sets of bands forming a band flight adapted to change 55 the direction of travel of the label from the horizontal to the vertical. The bands are preferably of the endless coil spring type, and serve to carry the label between them downwardly past an adhesive-applying instrumentality 60 which includes a plurality of disks 61 located to contact with one face of the label as the latter passes downward in the flight, thus giving the striping effect indicated in Fig. 2. As shown, the lower 65 end of this flight is spaced some distance

above the top of table 23, the label being fed downward by the action of the flight, the advancing movement of carrier 47 introducing the advance end of the label into the entrance to this flight, whereupon the movements of the flight control the feed action of the label, the flight generally traveling at a higher speed than the speed of advance of the carrier, although the latter has a variable speed action during its advancing 75 movement due to the particular form of operating means.

In the present application of this instrumentality, the drive connections are different from those of the companion applications, 80 as will be understood from the following.

62 designates a vertically extending shaft driven by a gear connection 63 with shaft 21, the arrangement shown being that of spiral gears. The upper end of shaft 62 85 has a bevel gear connection with a horizontally-extending shaft 64, said shaft carrying a gear 65 adapted to mesh with gear 50, and also carrying a gear 66 adapted to mesh with a gear 67 mounted in a shiftable element 68 pivotally mounted on shaft 64, gear 67 in turn meshing with a gear 68^a on the shaft of roll 54, these several connections causing carrier 47 to be operated from gear 65, while roll 54 is operated from gear 66. 95 Rolls 54 and 52 are operatively connected by gears, as are rolls 51 and 52, so that driving of roll 54 in the manner indicated, causes similar movement to roll 52 direct and roll 51 through the gear connection 100 with roll 52. The shaft of roll 52 also carries a sprocket wheel 69 which is adapted to drive the adhesive-applying instrumentality.

As will be seen, the drive of the band 105 flight mechanism is independent of the drive for the label advancing carrier, although both drive structures are mounted on shaft 64. This permits variation in speeds of the band formed flight structure, by simply 110 substituting gears of different speed relation for gears 66 and 67, member 68 being made adjustable for this purpose. For instance, gears 66 and 67 may be interchanged. Consequently, the speed of travel of a label 115 through the band formed flight can be changed by the substitution of gears of one ratio for those of a different ratio, while the reciproction of the carrier remains the same.

This ability to change the speed of travel 120 of the band formed flight, in connection with the adjustability of stop collar 37, are generally the main changes made in the apparatus when one size of container is substituted for another. For instance, in Fig. 1, the apparatus is shown as arranged to operate in connection with containers of the maximum length. Should a container of less length be provided, stop collar 37 would be shifted to the right in Fig. 1 a distance 130

equal to the decrease in length, thus increasing the length of lost motion of sleeve 33^a while obtaining the same general action as described. Should the changed container

5 have a height sufficiently increased so as to employ a label of the same length as before, no change in speed of the band flight need be had, since practically the same conditions would be present in either case.
10 Should, however, the band length of the three faces of the container—the top and the two ends—be materially varied from that previously employed, thus varying the length of the label, it may be desirable to
15 change the speed of the band formed flight in order that proper feeding action will be had, it being understood, of course, that the rear end of the label should be released from the discharge end of the flight practically
20 at such time as is demanded by the container which is advancing during the latter part of the feed.

In this latter connection, the spacing of the lower end of the flight above table 23
25 is of importance, in that it provides a space above the container in which an intermediate portion of the label may freely sag to a more or less extent until the slack is taken up by the advancing container. Hence an
30 increase or decrease in speed can be had within reasonable limits without affecting the general operation.

Element 68 can be adjustably secured in position through the slotted connections
35 shown in Fig. 7.

As heretofore pointed out, the initial action on the container when lever 42 begins its advance movement is to clamp the container and the advance end of the label between blades 33^a and 34^a. As lever 42 continues its advance movement, the clamping
40 unit thus formed advances and carries the advance end of the container beneath a plurality of wiping brushes 70, these brushes being mounted in a frame 71 vertically adjustable in brackets so as to locate the
45 brushes in position to wipe the label on to the top of the advancing container, a suitable number of brushes being employed, three being indicated in the drawings.

As will be seen, the first brush is so located as to provide a face against which the descending label may contact as the advancing clamped container draws the label
55 so that assurance is practically had that the label application will be substantially free from buckling, etc. It will also be understood that the resistance provided by the brush faces as the label is being drawn forward by its clamped end, will also tend to
60 cause that portion of the label which is not clamped at the front end of the container to be drawn into contact therewith so that proper label-applying on the advance end
65 and on the top will cause the label to closely

fit the corner of the container formed at the meeting points of the top and the front end of the container.

Advance of the container not only applies the intermediate portion of the label to the
70 top of the container—leaving the portion of the label for the rear end trailing behind the container—but also carries the embryo package thus produced between two horizontally-extending plates 72^a and 72^b supported by brackets 72 secured on vertically
75 extending members 73 located in rear of the path of travel of the embryo package, the lower ends of member 73 extending in guides and being adapted to be reciprocated vertically
80 as presently described. The brackets for plates 72^b are adjustable vertically on member 73 in order to vary the distance between the two plates, plate 72^a, when this carrier structure is in its lower position, having
85 its top face substantially flush with the top face of table 23, this top face of plate 72^a practically forming a continuation of the table surface when the carrier is in this position. As a result the advancing package
90 simply passes into the space between plates 72^a and 72^b, the end of the advance movement being arranged so that the rear end of the container is flush with or slightly overlaps the periphery of the last of the
95 brushes 70, the succeeding vertical movement of the carrier bringing the trailing end of the label on to the rear end of the container.

It will be understood, of course, that
100 plates 72^a and 72^b will be spaced apart a distance sufficient to freely receive the embryo package, without, however, tending to damage the label during the advancing
105 movement of the package. If desired, the under face of plate 72^b may be provided with a more or less yieldable friction surface, although this is not essential.

This carrier structure is operated at timed intervals by connections between the carrier
110 and a controlling cam 74 mounted on shaft 21, through the following connections. One of the members 73 has a portion 73^a carrying rack teeth, adapted to cooperate with a
115 pinion 75, said pinion being in mesh with a gear 76, the shaft of which also carries a pinion 77 in mesh with a gear or segment 78 (Fig. 12) suitably supported and which may be loosely mounted on the shaft which supports pinion 75. 79 indicates a pitman having
120 one end connected to gear or segment 78, the opposite end of the pitman straddling shaft 21 and having a roll operative in the groove of cam 74, the pattern of this groove being arranged to provide reciprocations of the carrier vertically and intermittently, the carrier being placed in its lower
125 position to permit advance of the embryo package therein, after which it moves upwardly to its opposite extreme, dwelling in
130

this position a sufficient length of time to permit removal of the package, as presently described, then returning to its initial position, the train of gearing described providing for a sufficient length of movement of the rack bar to produce this result by the use of simple mechanism which can be controlled by a cam of this type.

It is to be understood, of course, that after the advancing clamping unit has carried the embryo package to its forward position, thus locating it between plates 72^a and 72^b, a sufficient rearward movement of lever 42 will release the package by the lost motion movement of sleeve 33^a, and during this period the package-raising carrier moves vertically to carry the package and plates out of the path of blade 34^c, so that the latter is free to return as lever 42 continues its return movement, the rapidity of upward movement of the carrier enabling this general action to take place. It will also be understood that since the throw of lever 42 is uniform in each instance, sleeve 33^a will advance to the same point during each advance movement of the unit of which it forms a part. Consequently, the rear end of the embryo package will always be delivered at the same point relative to the vertical carrier, thus insuring proper application of the trailing end of the label. The advance end of the container may be located at different points with respect to the carrier, this being immaterial, as long as blade 34^c reaches a point where plate 72^a is free to pass vertically.

Upward movement of the carrier not only carries the package out of the path of blade 34^c so as to permit the latter to return to its initial position while the carrier is out of its lower position, but also locates the top of plate 72^a in the same plane with the top of a table 80 supported on a suitable bracket structure, thus placing the package at a point where it can be shifted laterally from off of said plate on to the top of the table. This discharging of the package is provided by a plunger 81 having a plate 81^a normally located in rear of the package, the plunger having a reciprocating motion in which the advance causes plate 81^a to advance between plates 72^a and 72^b to shift the package on to table 80, it being understood that the carrier arrangement is such that the rear side is open to permit of the free movement of this plate during reciprocation of the plunger. The plunger action is provided by the following mechanism:

The plunger is carried by a slide 82, the latter having a pedestal 82^a for supporting the plunger at the proper elevation. The slide is movable on ways 83, and is provided with rack teeth which cooperate with a gear 84, the shaft of which carries a pinion 85 in mesh with a gear or segment 86.

Gear or segment 86 is operatively connected with a cam 87 on shaft 21 through a pitman 88 which has one end pivoted to the gear or segment, the opposite end straddling shaft 21, the pitman preferably having a roller 88^a operating in the groove of cam 87, the pattern of the groove being such as to cause an oscillatory movement of gear or segment 86 which, through the train of gearing, causes reciprocation of the slide at predetermined intervals, the timing being such, of course, that the complete cycle of operation takes place while the carrier remains in its upper position, the latter returning to lower position after plate 81^a has passed out of the path of travel of the rear of the carrier.

As will be seen, the several mechanisms are so arranged as to practically locate predetermined faces of a package at similar points regardless of the particular size of the package. For instance, the advancing movement of the container through the action of plunger 25 is in the same direction as the direction of advance of plunger 81, thus locating the rear side wall of the container at a predetermined point or vertical plane for the successive travel lengthwise and laterally vertical during the labeling operation, the inner extreme of movement of plunger 25, thus practically determining the position of the rear face of the package at the discharging station, thus permitting plate 81^a to have its normal position at a point in proximity to this rear wall when the package is brought to the discharging station. This effect is present whether the width of the container is increased or decreased, the variation in width being ineffective to change this condition. In addition, the travel of the container through the labeling operation substantially maintains this rear wall on the same vertical plane, so that under the general conditions—wherein the label is assumed to practically cover the top of the container—variation in width of the container does not materially affect the position of the guides of the corresponding edge of the label, adjustment for different width of label under these conditions being with respect to the opposite edge of the label.

In other words, the operations are made practically with respect to a vertical plane corresponding to the position of the rear side wall of the container when introduced into the labeling mechanism, the container being advanced across this plane to its position in the receiving station, remaining on this plane throughout the labeling operation and then being moved away from this plane in the discharging station, plate 81^a practically continuing the movement of the container after plunger 25 has located the container in the labeling instrumentalities, all 1

movements of the container being relative to this plane, the movements being successively transverse, longitudinal, vertical, and again transverse of the direction of length of the container.

As heretofore pointed out, the apparatus is adapted to operate in connection with containers and labels of various sizes, plunger 25 requiring no change, for reasons pointed out, adjustment of stop collar 37 taking care of differences in length of the container, adjustability of the label guides and the variable speed changes permitted in connection with the band flight taking care of changes in label sizes and adjustability of plate 72^b accommodating for different depth of containers, the general operation being such that these changes do not affect the labeling operation in any material manner.

Gears or segments 78 and 86 are shown in gear form, but it will be obvious that a segment having a sufficient number of teeth to take care of the oscillations provided by the pitman with which each is connected may be employed in place of a complete gear, this being a well-known mechanical equivalent.

And while I have herein referred to the application of adhesive stripes to the label and the use of an adhesive-applying mechanism, it will be understood that the labeling operation may be provided by the use of labels previously striped and the adhesive dried, in which case the adhesive applying instrumentality will be adapted to moisten the previously applied adhesive, these types of producing a sticky adhesive surface being considered as equivalents in this particular type of work.

It will also be understood that while I have herein referred to a label, the apparatus is adapted to be employed in connection with stamps and other elements of covering structures, and the invention is not to be considered as limited by the use of the term "label".

While I have herein shown and described a preferred embodiment of the invention, it will be understood that changes and modifications therein may be required or found desirable to meet the various exigencies of use, and I desire to be understood as reserving the right to make any and all such changes or modifications as may be found necessary or desirable in so far as the same may fall within the spirit and scope of the invention as expressed in the accompanying claims when broadly construed.

Having thus described my invention, what I claim as new, is:

1. In machines for labeling containers or the like, a receiving station, a container-advancing instrumentality having clamping members, said instrumentality being adjustable to accommodate containers of different

lengths, label feeding mechanism operative to deliver a label end into said station at a predetermined delivery speed, said mechanism having means for varying the delivery speed of the label, label applying means in the path of the advancing instrumentality, and a carrier movable transversely to the travel path of the instrumentality, said carrier being adjustable to accommodate containers varying as to depth.

2. In machines for labeling containers or the like wherein the label is applied successively to one end, the top and the opposite end of a rectangular container, a receiving station, means for locating the container and its label in said station with a label end in advance of the container, mechanism for clamping the label end in applying position to the container, label-applying means, and means for advancing the container and its clamped label relative to said label-applying means to first complete label application to the advance end and the top of the container and then to the opposite end of the container.

3. In machines for labeling containers or the like wherein the label is applied successively to one end, the top and the opposite end of a rectangular container, a receiving station, means for locating the container and its label in said station with a label end in advance of the container, mechanism for clamping the label end in applying position to the container, label-applying means, means for advancing the clamped container and its label relative to said label-applying means to complete label application to the advance end and the top of the container, said clamping and advancing means being rendered inactive upon completion of said label application, and means for moving the container with its partially-applied label relative to said label-applying means in a direction angular to the container advance for completing the label application.

4. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, means for locating a label end in relative position to a positioned container end to which it is to be applied in advance of instrumentality activity, and means for completing label application to said container end and the top of the container during such instrumentality advance.

5. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a pair of container-

clamping members normally located opposite to and spaced from the ends of a positioned container, means for locating a label end between the advance end of the container and its opposed clamping member, label-applying means, and means for advancing the instrumentality to first clamp the container with the label end in position and then completing label application to such advance end and the top of the container.

6. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a pair of container-clamping members normally located opposite to and spaced from the ends of a positioned container, said members being relatively movable to vary the distance therebetween, means for locating a label end between the advance end of the container and its opposed clamping member in advance of member movement to decrease such distance, label-applying means, and means for advancing the instrumentality to first clamp the container by decreasing the member distance and then completing the label application to such advance end and the top of the container.

7. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a sleeve carrying a clamping member, a second sleeve mounted thereon and movable relatively thereto and carrying a second clamping member, said members being normally located opposite to and spaced from the opposite container ends, means for locating a label end between the advance end of the positioned container and its clamping member, and means whereby said members will be moved relatively to each other to clamp the container and such label end during advancing movement of the instrumentality.

8. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a sleeve carrying a clamping member, a second sleeve mounted thereon and movable relatively thereto and carrying a second clamping member, said member being normally located opposite to and spaced from the opposite container ends, means for locating a label end between the advance end of the positioned

container and its clamping member, an adjustable collar carried by said first-mentioned sleeve and forming a stop to limit the distance variation of the members in one direction, and means whereby said members will be moved relatively to each other to clamp the container and such label end during advancing movement of the instrumentality.

9. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a sleeve carrying a clamping member in advance of a positioned container, a second sleeve mounted thereon and movable relatively thereto and carrying a second clamping member in rear of such positioned container, said members being normally located opposite to but spaced from the positioned container, means for locating a label end between the advance member and the container, a collar carried by and adjustable in the direction of length of the first-mentioned sleeve to permit a limited independent movement of the rear clamping member to permit clamping of the positioned container with the label end in position, a drive shaft, and means operatively connecting said second sleeve to the drive shaft.

10. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, said instrumentality including a sleeve carrying a clamping member in advance of a positioned container, a second sleeve mounted thereon and movable relatively thereto and carrying a second clamping member in rear of such positioned container, said members being normally located opposite to but spaced from the positioned container, means for locating a label end between the advance member and the container, a collar carried by and adjustable in the direction of length of the first-mentioned sleeve to permit a limited independent movement of the rear clamping member to permit clamping of the positioned container with the label end in position, a drive shaft, and means operatively connecting said second sleeve to the drive shaft, said latter means including a cam, a pivoted lever connected to said sleeve, and operative connections between the cam and said lever for oscillating the latter on its pivot.

11. In labeling machines, a receiving station for the article to be labeled, a pair of clamping members normally positioned at opposite ends of the article and spaced

therefrom in the receiving station, means for locating a label end between the article and one of said members, a pair of sleeves for supporting said members, means for imparting a reciprocating movement of constant length to one of said sleeves, operative connections between said sleeves to control the length of movement of the other sleeve to clamp the article and positioned label, and means for applying label portions to the clamped article.

12. In labeling machines, a receiving station for the article to be labeled, a pair of clamping members normally positioned at opposite ends of the article and spaced therefrom in the receiving station, means for locating a label end between the article and one of said members, a pair of sleeves for supporting said members, means for imparting a reciprocating movement of constant length to one of said sleeves, operative connections between said sleeves to adjustably control the length of movement of the other sleeve to clamp the article and positioned label, and means for applying label portions to the clamped article.

13. In labeling machines, a receiving station for the article to be labeled, means for locating an end of the label in said station in advance of the positioned article, a pair of clamping members normally positioned at opposite ends of the article and spaced therefrom in the receiving station, a pair of sleeves for supporting said members, means for imparting a reciprocating movement of constant length to one of said sleeves, and operative connections between said sleeves to control the length of movement of the other sleeve.

14. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, a label supply, means for feeding individual labels successively from said supply to deliver a label into said station in a direction angular to the direction of advance of the instrumentality with the advance end of the label in advance of the positioned container, said instrumentality including clamping means operative to clamp the label end to the container during instrumentality advance movement, and means for completing label application to said container end and the top of the container during such advance movement.

15. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container-advancing instrumentality movable from said station in the direction of label application, a label supply, means for feeding individual labels

successively from said supply to deliver a label into said station in a direction angular to the direction of advance of the instrumentality with the advance end of the label in advance of the positioned container and for applying adhesive to a face of the label in advance of such label positioning, said instrumentality including clamping means operative to clamp the label end to the container during instrumentality advance movement, and means for completing label application to said container end and the top of the container during such advance movement.

16. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end, said mechanism including gripping elements, and means for adjustably regulating the gripping positions of said elements to accommodate containers of different length.

17. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers in the direction of label application to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end, said mechanism including gripping elements, and means for adjustably regulating the gripping positions of said elements to accommodate containers of different length.

18. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end, said mechanism including gripping elements movable to vary the distance therebetween in gripping the container, and an adjustable stop device for controlling the minimum distance between said elements.

19. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end, said mechanism including gripping elements movable

able relatively to each other to provide distance decrease therebetween during the gripping operation, said label feeding means locating the label end between the container

5 end and opposed gripping element, and an adjustable stop device operative to limit the length of such relative movement.

20. In machines for applying labels and adapted to apply a label to the top and an
10 end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels
15 to locate a label advance end in relative position to the container advance end, said mechanism being adapted to be reciprocated bodily and including gripping elements movable relatively to each other and normally
20 spaced a maximum distance while in said station, said label feeding means locating the label end between the container end and opposed gripping element, and adjustable means for limiting the minimum spacing of
25 said elements.

21. In mechanism for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping
30 containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end, said
35 mechanism being adapted to be reciprocated bodily and including gripping elements movable relatively to each other and normally spaced a maximum distance while in said station, said label feeding means locating the
40 label end between the container end and opposed gripping element, and adjustable means for limiting the minimum spacing of said elements, and means for reciprocating said mechanism, movement of said mechanism in one direction being with maximum
45 spacing of the elements, the bodily movement of the mechanism in the other direction being with said elements at gripping spacing.

22. In machines for applying labels and adapted to apply a label to the top and an
50 end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels
55 to locate a label advance end in relative position to the container advance end to be gripped by the gripping mechanism, said means including a flight adapted to deliver
60 the label at predetermined speed, and means for varying the delivery speed of such label.

23. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping

containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end to be
70 gripped by the gripping mechanism, said means including a flight adapted to deliver a label into said station at predetermined speed, said flight being operative to present a face of the label to adhesive-applying
75 mechanism, and means for varying the delivery speed of said flight.

24. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container
80 receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end to be
85 gripped by the gripping mechanism, said means including a band-formed flight operative at a predetermined delivery speed and positioned to deliver the label into said
90 station in advance of a positioned container in a direction angular to the direction of travel of said mechanism.

25. In machines for applying labels and adapted to apply a label to the top and an
95 end of a container or the like, a container-receiving station, mechanism for gripping containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding
100 labels to locate a label advance end in relative position to the container advance end to be gripped by the gripping mechanism, said means including a band-formed flight operative at a predetermined delivery speed
105 and positioned to deliver the label into said station in advance of a positioned container in a direction angular to the direction of travel of said mechanism, and means for varying the delivery speed of said flight.
110

26. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, mechanism for gripping
115 containers individually in said station and for advancing the gripped containers to apply the label, and means for feeding labels to locate a label advance end in relative position to the container advance end to be gripped by the gripping mechanism; said
120 means including a flight for delivering a label into said station at predetermined speed, and means for varying the delivery speed of the flight, said mechanism including gripping elements, and means for
125 adjustably regulating the gripping positions of said elements, whereby the machine is adapted for label application with containers and labels of various dimensions.

27. In labeling machines, a receiving sta- 130

tion for the article to be labeled, an article carrier movable to and from said station in the direction of length of the article, said carrier including clamping members located at opposite ends of the positioned article, means for feeding a label end into such station in advance of a positioned article and in rear of the opposed clamping member and with the label extending in a direction angular to the direction of advancing movement of the carrier, said label feeding means including a traveling flight movable to deliver the label at predetermined speed, means for varying the delivery speed of said flight, and means for controlling the distance between said clamping members.

28. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a container-receiving station, a container-advancing instrumentality having clamping members, means for advancing a container laterally into said station between said members, means for locating a label end in advance of the positioned container and in position to be clamped to the container by one of said members, and means for completing label application to said advance end and the top of the container during such instrumentality advance.

29. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a container-receiving station, a container-advancing instrumentality having clamping members, means for advancing a container laterally to locate the container in predetermined position between said members within said station with the rear side wall of the advancing container on a predetermined vertical plane, means for locating a label end in advance of the positioned container and in position to be clamped to the container by one of said members, label-applying mechanism, and means for advancing said instrumentality to complete label application to said advance end and top of the container, said means maintaining said wall on said vertical plane during the advance movement.

30. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a container-receiving station, a container-advancing instrumentality having clamping members, means for advancing a container laterally to locate the container in predetermined position between said members within said station with the rear side wall of the advancing container on a predetermined vertical plane, means for locating a label end in advance of the positioned container and in position to be clamped to the container by one of said members, label-applying mechanism, and means for ad-

vancing said instrumentality to complete label application to said advance end and top of the container, said means maintaining said wall on said vertical plane during the advance movement, said instrumentality having a configuration to permit positioning of containers of different widths.

31. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality, means for locating a label end in said station in advance of a positioned container, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for completing application of the label to the container.

32. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality, means for locating a label end in said station in advance of a positioned container, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for applying the label to the rear end of the container during movement of the carrier.

33. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality, means for locating a label end in said station in advance of a positioned container, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for completing application of the label to the top of the container, said means being operative to apply the rear end of the label to the corresponding end of the container during movement of the carrier.

34. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality, means for locating a label end in said station in advance of a positioned container, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for completing application of the label to the top of the container, said means being positioned relative to the carrier to cause label application to the rear end of the container during travel of the carrier.

35. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality movable in the direction of label application, means for locating a label end in said station in advance of a positioned container, a vertically

reciprocating carrier in the path of an advancing container, means for advancing said instrumentality from the receiving station to locate the rear end of the container at a
 5 predetermined point relative to said carrier, and label-applying means between said carrier and the receiving station for completing application of the label to the top of the container during such advancing movement,
 10 said applying means being positioned relative to said point in such manner that vertical travel of the carrier will apply the rear end of the label to the corresponding end of the container.

15 36. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality movable in the direction of label application, means for
 20 locating a label end in said station in advance of a positioned container, a vertically reciprocating carrier in the path of an advancing container, means for advancing said instrumentality from the receiving station
 25 to locate the rear end of the container at a predetermined point relative to said carrier, a label wiping brush between said carrier and the receiving station for completing application of the label to the top of the container during instrumentality advance, said
 30 brush being positioned relative to said point to cause said brush to wipe the rear end of the label to the corresponding end of the container during travel of the carrier.

35 37. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a container-receiving station, a container advancing instrumentality movable in the direction of
 40 label application, means for locating a label end in said station in advance of a positioned container with the label extending in a direction angular to the direction of advance of the container, and label applying
 45 means in the path of the advancing instrumentality and operative to complete the application of the label to the top of the container, said applying means including a label wiping brush positioned above the
 50 path of travel of the instrumentality and adapted to serve as a guide for the label during such instrumentality advance.

38. In machines for applying labels to the top and opposite ends of a container or
 55 the like, a container receiving station, a container advancing instrumentality movable in the direction of label application, means for locating a label end in said station in advance of a positioned container
 60 with the label extending angular to the direction of advance of the instrumentality, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the
 65 receiving station for completing the appli-

cation of the label to the top of the container during such instrumentality advance, said means being located above the travel path of the instrumentality and adapted to serve as a guide for the label during such
 70 instrumentality advance.

39. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality movable
 75 in the direction of label application, means for locating a label end in said station in advance of the container with the label extending angular to the direction of advance of the instrumentality, a vertically recip-
 80 rocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for completing the label application, said means being located above the travel
 85 path of the instrumentality and positioned relatively to the label and to said carrier to cause said means to serve as a guide for the label during instrumentality advance and to apply the rear end of the label to the
 90 corresponding end of the container during travel of the carrier.

40. In machines for applying labels to the top and opposite ends of a container or the like, a container receiving station, a container advancing instrumentality movable
 95 in the direction of label application, means for locating a label end in said station in advance of the container with the label extending angular to the direction of advance
 100 of the instrumentality, a vertically reciprocating carrier in the path of an advancing container, and label applying means between said carrier and the receiving station for completing the label application,
 105 said means including a plurality of wiping brushes positioned above the travel path of the instrumentality, one of said brushes being adapted to serve as a guide for the label during instrumentality advance, a second
 110 brush being adapted to wipe the rear end of the label on to the corresponding end of the container.

41. In machines for applying labels to the top and opposite ends of a container or
 115 the like, a container receiving station, a container advancing instrumentality movable in the direction of label application, said instrumentality including clamping members, means for advancing a container laterally to locate the container in predeter-
 120 mined position between said members with in said station with the rear side wall of the container on a predetermined vertical plane, means for locating a label end in
 125 advance of the positioned container and in position to be clamped to the container by one of said members, a vertically reciprocating carrier in the path of an advancing container, label applying means between said
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carrier and the receiving station for completing the label application, and means for advancing the positioned container to locate its rear end at a predetermined point 5 relative to said carrier, the advance movement of the container maintaining said container wall in said vertical plane, said instrumentality and said carrier each having a configuration to accommodate different 10 widths of container while maintaining said rear side wall on said plane.

42. In machines for applying labels to the top and opposite ends of a container or the like, a receiving station, means for 15 locating a container and its label in said station with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction 20 of label application to complete label application to said end and the top of the container, and mechanism for shifting the container and its applied label out of such travel path, said mechanism being operative 25 in the application of the remainder of the label to the container.

43. In machines for applying labels to the top and opposite ends of a container or the like, a receiving station, means for locating 30 a container and its label in said station with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application 35 to complete label application to said end and the top of the container, and mechanism for shifting the container and its applied label out of such travel path, said mechanism including a pair of plates, means 40 for supporting said plates in spaced parallel planes, and means for reciprocating said supporting means vertically.

44. In machines for applying labels to the top and opposite ends of a container or the like, a receiving station, means for locating 45 a container and its label in said station with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application 50 to complete label application to said end and the top of the container, and mechanism for shifting the container and its applied label out of such travel path, said mechanism including a pair of plates, means 55 for supporting said plates in spaced parallel planes, and means for reciprocating said supporting means vertically between two positions, said reciprocating means being active to provide a dwell in each position, whereby said plates may receive a labeled 60 container at one position, shift it out of

such position to permit return of the advancing means for a succeeding operation and to concurrently apply the remainder of the label, and locate the container in position for removal from the plates. 70

45. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with a label end in 75 advance of the container, mechanism for clamping the label end in applying position to the container and for advancing the container and clamped label in a predetermined travel path in the direction of 80 label application to complete label application to the said end and the top of the container, said mechanism including opposing clamping members between which the container and label are clamped, and a carrier 85 for receiving the container and its applied label, said carrier being movable in a direction transverse to the path of travel of the advancing container.

46. In labeling machines, a container-receiving station, a container-advancing instrumentality having container-clamping 90 members between which the container is positioned in said station, said members being relatively positioned to freely receive 95 the container by a lateral movement of the latter, means for moving said members relatively to clamp the container, label applying means operative on a clamped container, and means whereby both members when in 100 clamping position will move in unison to carry the container into operative relation to the label applying means.

47. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with a label end in 105 advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete application to said end and the top of the container, and means for shifting the container 110 and its applied label out of such travel path while the advancing means is in its advance position, whereby said advancing means is free to return for a succeeding operation during container movements to 115 deliver the labeled container from the machine. 120

48. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with a label end in 125 advance of the container, means for clamping the label end in applying position to the container and for advancing the container 130

in a predetermined travel path and in the direction of label application to complete application to said end and the top of the container, and means for shifting the container and its applied label out of such travel path while the advancing means is in its advance position, said shifting means including a reciprocating carrier operative in a direction transverse to said container travel path.

49. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete application to said end and the top of the container, and means for shifting the container and its applied label out of such travel path while the advancing means is in its advance position, said means including a reciprocating element movable in directions transverse to the travel path of the container.

50. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete application to said end and the top of the container, and means for shifting the container and its applied label out of such travel path while the advancing means is in its advance position, said means including a reciprocating carrier movable in directions transverse to such container travel path, and means for discharging the container from the carrier while the latter is out of such travel path.

51. In machines for applying labels and adapted to apply a label to the top and an end of a container or the like, a receiving station, means for locating a container and its label in said station with the label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete application to said end and the top of the container, and means for shifting the container and its applied label out of such travel path while the advancing means is in its advance position, said means including a reciprocating carrier movable in directions transverse to such container travel path,

and means operative when said carrier is out of such travel path for discharging the container laterally from said carrier.

52. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a receiving station, means for locating a container and its label in said station with a container side wall on a predetermined vertical plane and with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete label application to said end and the top of the container, said advancing means being operative to retain said container wall on said vertical plane during movement, and means movable from the opposite side of and through said plane for shifting the container and its applied label away from said plane and out of the path of a succeeding container and its applied label.

53. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a receiving station, means for locating a container and its label in said station with a container side wall on a predetermined vertical plane and with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete label application to said end and the top of the container, said advancing means being operative to retain said container wall on said vertical plane during movement, a carrier movable transversely to the direction of container advance for moving the container out of its travel path, said advancing means and carrier being operative to retain said container wall on said vertical plane during movement, and means movable from the opposite side of and through said plane for shifting the container and its applied label away from said plane and out of the path of a succeeding container and its applied label.

54. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a receiving station, means for locating a container and its label in said station with a container side wall on a predetermined vertical plane and with a label end in advance of the container, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete label application to said end and the top of the container, said advancing means

being operative to retain said container wall on said vertical plane during movement, and a reciprocating plunger normally positioned on the opposite side of and movable through said plane for shifting the container and its applied label away from said plane and out of the path of a succeeding container and its applied label.

55. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a receiving station adapted to receive a container and its label with a label end positioned in advance of the container, means for advancing a container into said station with the advance movement carrying the container across a predetermined vertical plane on which a side wall of the container is located in said station, means for positioning the label end, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete label application to said end and the top of the container, said advancing means being operative to retain said container wall on said vertical plane during movement, and means operative on the container with its applied label for shifting the latter transversely away from said plane to discharge the container, said latter means being movable across said plane during the container discharging operation.

56. In labeling machines for applying labels and adapted to apply a label to the top and an end of a rectangular container or the like, a receiving station adapted to receive a container and its label with a label end positioned in advance of the container, means for advancing a container into said station with the advance movement carrying the container across a predetermined vertical

plane on which a side wall of the container is located in said station, means for positioning the label end, means for clamping the label end in applying position to the container and for advancing the container in a predetermined travel path and in the direction of label application to complete label application to said end and the top of the container, a carrier movable transversely to the direction of container advance for moving the container out of its travel path, said advancing means and carrier being operative to retain said container wall on said vertical plane during movement, and means operative on the container and its applied label while positioned in said carrier for shifting the latter transversely away from said plane to discharge the container from the carrier, said latter means being movable across said plane during the container-discharging operation.

57. In apparatus for applying a sheet or label to a packet, and wherein the packet and sheet or label are brought into relative positions for application of the sheet or label, means for advancing the packet and sheet or label to partially apply the latter, a vertically reciprocating carrier into which the packet and the sheet or label are delivered, means for shifting said carrier and concurrently continuing the sheet or label application to locate the packet and its sheet or label in a different plane, and mechanism for discharging the packet and its sheet or label from the carrier when in the latter plane, said mechanism including a reciprocating plunger, a cam, an oscillatory gear element, a pitman connection between the cam and gear element, and a gear train between the gear element and said plunger.

In testimony whereof I have hereunto set my hand.

HILARION DE ESCOBALLES.